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March 14, 2025

Mr. Bradley Demo
New York State Department of Environmental Conservation, Region 9
Division of Environmental Remediation
700 Delaware Avenue
Buffalo, New York 14209

Subject: 02/15/24 – 02/15/25 PERIODIC REVIEW REPORT
Chem-Trol Site, Registry No. 9-15-015
Blasdell, Erie County

Dear Mr. Demo:

AECOM USA, Inc. (AECOM), on behalf of SC Holdings, Inc. (SC Holdings), is submitting this Periodic Review Report (PRR) along with a completed Institutional Controls and Engineering Controls (IC/EC) Certification Form (Attachment A) for the Chem-Trol site for the reporting period of February 15, 2024 to February 15, 2025. This report is being submitted as requested by the New York State Department of Environmental Conservation (NYSDEC) in its letter dated February 11, 2025 to Mr. Ryan Donovan. The letter directs the next PRR and IC/EC form be submitted to NYSDEC no later than March 15, 2025.

I. INTRODUCTION

The Chem-Trol site is located at 4818 Lake Avenue, Town of Hamburg, in Erie County, New York. Chem-Trol Pollution Services (Chem-Trol) purchased the property in 1969 and operated the site as a waste chemical processing facility that included chemical recovery, storage, and neutralization. Wastes, including capacitors, pesticides, oil sludges, paint sludges, spent solvents and pickle liquors, were accepted at the facility for processing. The facility ceased operations in 1972.

As a result of historic waste processing activities, on-site soil and groundwater were impacted with heavy metals and volatile organic compounds (VOCs). In 1977, as part of the facility closure activities, Chem-Trol removed approximately 95 cubic yards of contaminated soils, placed clean soil cover and established vegetative cover over the area.

Investigative studies led to a Record of Decision (ROD) in 1996 that specified additional remedial activities. These included removal of additional soils, and construction of a soil vapor extraction (SVE) system and groundwater collection and treatment system. The SVE system includes a header pipe and eight subsurface laterals installed in a linear array within the area of remediated soils. The groundwater collection and treatment system includes a blast-fractured bedrock trench in which three groundwater collection wells are installed, conveyance piping, and a shallow tray air stripper that

removes VOCs from the collected groundwater. The treated groundwater is discharged through a pipe to the South Branch of Smokes Creek.

The SVE system and the groundwater collection and treatment system continue to operate. During 2010, McMahon & Mann Consulting Engineers, PC (MMCE) evaluated the effectiveness of passive operation of the SVE system in removing soil vapors. Subsequently, the SVE system was converted from active to passive operation in 2010. A copy of the SVE system evaluation letter report was included as Attachment B in the 2010 PRR (see Attachment B).

II. SITE OVERVIEW

The Chem-Trol site is situated in an urban setting with industrial/commercial areas to the north and east, commercial development along Lake Avenue to the south, and residential areas to the west, across the South Branch of Smokes Creek. Figure 1 shows the Chem-Trol site location and features.

Investigations completed between 1991 and 1994 showed contaminated soils generally located in the former operations and surface lagoon areas. Additional soil contamination was found in the on-site tributary of Smokes Creek as well as the flood plain along the western edge of the site. Contaminated groundwater was found in the overburden as well as the shallow bedrock beneath the site. Groundwater contours developed as part of the investigations show that groundwater flows in a northwesterly direction beneath the site toward the South Branch of Smokes Creek.

Because of the on-site contamination, the Chem-Trol site was assigned a hazardous waste site classification of “Class 2” by NYSDEC. This classification indicates that the site poses a significant threat to public health and/or the environment and that action in the form of further investigations and remediation is required.

NYSDEC selected a remedial design based upon the results of the Remedial Investigation/Feasibility Study (RI/FS) for the Chem-Trol site. The March 1996 ROD selected a remedy that included:

- Excavation of soils and sediments from selected areas of the site;
- Installation of a groundwater collection trench along the western edge of the site;
- Improvement of the existing soil cover over the former chemical processing area; and
- Installation of a SVE system within the former waste chemical processing area.

Pre-design investigations and remedial design were completed between 1997 and 2000. Construction of the ROD-required remedial components was completed between 1999 and 2001. Operation, maintenance and monitoring of the remedial components began in 2001. In December 2004, the Chem-Trol site was re-classified to a “Class 4” site by NYSDEC. This classification indicates that remedial actions taken at the site to eliminate significant threats to public health and the environment have been properly constructed and implemented, and long-term operation, maintenance and monitoring of the in-place remedial systems is necessary to assure remedy effectiveness.

Goals for the remedial program were established through the remediation selection process given in 6 NYCRR 375-1.10. The remediation goals established for this site include:

- Reduce and remove chemical contamination in the soils, sediments and groundwater at the site;
- Eliminate the potential for direct human or animal contact with the contaminated soils, sediments, and groundwaters at the site;
- Prevent migration of contaminants in the on-site soils into the groundwater;
- Prevent off-site migration of contaminated groundwater and mitigate the impacts of contaminated groundwater to the environment; and
- Provide for attainment of Soil Cleanup Guidelines (SCG) for groundwater quality to the extent practical.

In the 2022 PRR approval letter from the NYSDEC to Mr. Ryan Donovan (SC Holdings, Inc.) dated May 4, 2023, NYSDEC approved a reduction in periodic monitoring requirements that were requested in the Conclusions and Recommendations section of the 2022 PRR. Beginning as of the date of that letter, groundwater treatment system sampling migrated from a monthly schedule to an every-other-month schedule (odd-numbered months), and system cleanings were maintained on an every-other-month schedule being performed on non-sample months (i.e., even-numbered months). Additionally, it was approved that water level gauging events would be reduced from quarterly to semi-annual, and annual groundwater monitoring would be reduced from annual to biennial on an even-numbered year schedule.

III. REMEDY PERFORMANCE, EFFECTIVENESS AND PROTECTIVENESS

SC Holdings continues to monitor the performance of the SVE and groundwater collection and treatment system.

SVE System

SC Holdings submitted a work plan to NYSDEC on October 22, 2009, proposing conversion of the active system to a passive venting system and monitoring the performance of the passive system for a year. NYSDEC authorized the conversion to a passive system along with monthly monitoring. The SVE treatment system was converted from active to passive operation in January 2010.

After a year of monitoring, SC Holdings submitted a report describing the monitoring results as indicating that passive operation of the SVE system provides similar and possibly improved effectiveness as active operation of the SVE system in venting soil vapors. Water level data in the passive vent risers indicated that passive venting might also contribute to generally lower water levels in the laterals for a longer period of time over the course of the year and therefore provide a greater opportunity to vent soil vapors.

It was recommended that active operation of the SVE system permanently cease and that passive operation of the SVE system laterals continue. In addition, it was recommended that continued monitoring of the SVE system laterals be eliminated. NYSDEC agreed with these recommendations in a letter to Mr. Mark Snyder dated March 29, 2011 (see Appendix B).

During this reporting period, the SVE system continued to operate passively. The lateral riser pipes were visually examined for damage during quarterly site visits. No damage was observed during these site visits.

Groundwater Collection and Treatment System

SC Holdings has the following actions performed by AECOM to monitor the performance of the groundwater collection system as required in the ROD:

1. Perform monthly operation and maintenance tasks on the system;
2. Perform periodic cleaning of the air stripper on an every-other-month schedule, including visual check of seals and removal of mineral accumulation in air stripper trays using mechanical means (scrubbing, re-drilling holes to full diameter, etc.);
3. Sample and analyze the groundwater collection and treatment system influent and effluent on an every-other-month basis for a site-specific list of 10 VOCs, Total Iron, Total Suspended Solids (TSS), and pH;
4. Measure and record water levels in groundwater extraction wells and groundwater monitoring wells on a semi-annual basis thereafter;
5. Prepare bedrock groundwater contours based on water level measurements collected during the year; and,
6. Obtain groundwater samples on a biennial even-numbered year schedule for VOCs from six groundwater monitoring wells.

Effluent from the groundwater collection and treatment system (air stripper) discharges into the South Branch of Smokes Creek. Aqueous effluent samples taken from the air stripper surface water discharge pipe are analyzed for surface water discharge parameter limit concentrations including VOCs by EPA Method 624.1, Total Iron by EPA Method 200.7, TSS by Standard Method (SM) 2540D, and pH by SM 4500 H+B. Analytical test results show that discharge parameter concentrations in the air stripper effluent for samples collected from March 2024 through February 2025 were below the concentration and mass loading discharge limits established by NYSDEC for each of the 6 required monitoring events (March, May, July, September, November 2024 and January 2025).

Treated water discharge effluent criteria for flow volume, pH, Total Dissolved Solids (TDS), TSS, ten VOCs (chloroethane, 1,1-dichloroethane, 1,1-dichloroethene, 1,1,1,trichloroethane, trichloroethane, benzene, toluene, o-chlorotoluene, chlorobenzene, and cis-1,2-dichloroethene), and six total metals (aluminum, boron, iron, lead, manganese, and zinc) were established in March 2001 (see Attachment B). A request to modify effluent criteria based on initial operating data was submitted to NYSDEC by MMCE (consultant to SC Holdings) in December 2004. NYSDEC responded to the request in July 2007 approving a modification of effluent criteria for iron (increased from 700 micrograms per liter to 3 milligrams per liter), and discontinuation of monitoring for TDS, aluminum, boron, lead, manganese, and zinc (see Attachment B).

Pursuant to the May 2023 NYSDEC-approved revisions to sampling and reporting requirements, analytical test results for the aqueous effluent samples are to be submitted semi-annually, with the

first 6 months of the year being submitted to NYSDEC in a dedicated semi-annual Operation and Maintenance (O&M) Report and the second six-months of the year to be submitted to NYSDEC with the annual PRR. Results for the March, May, and July 2024 sampling events were submitted to NYSDEC in a semi-annual report dated July 31, 2024. The results for September and November 2024 and January 2025 are included with this report (see Attachment C). Photographs to be collected per the NYSDEC February 11, 2025 letter have begun and will be presented in future semi-annual O&M and annual PRR reports.

Total system flow is monitored via a total influent system flow meter located within the groundwater treatment building. Total system flow is recorded during each sampling or service visit. Total system flow is presented on the site visit summary sheets contained in Attachment C. Individual extraction well flow meters are also installed. However, the low flow rates from the individual wells does not produce reliable data for the individual wells on a consistent basis. Individual flow meters are periodically dismantled and cleaned to optimize performance; however, at the low flow rates, the flow meters are often unable to transmit a flow rate to the master control panel. To verify individual wells are pumping, the service team isolates individual wells and monitors the total flow meter to estimate each individual well flow.

As noted above, the air stripper is serviced on a periodic schedule (even-numbered months) to remove mineral accumulation (iron fouling) from the air stripper trays. The trays are removed from the system and the mineral deposits are removed using mechanical means (scrubbing, re-drilling holes to full diameter, etc.). The naturally occurring mineral deposits are dispersed to the ground surface within the secure limits of site within the fence line in areas not prone to surface water runoff. The trays are returned to the air stripper unit, and the system is restarted and checked for proper operation prior to service crew leaving site.

Monthly testing of the air stripper exhaust discharge (vapor phase) samples ceased after April 2011. Monthly testing was eliminated based upon a letter from Al Zylinski, NYSDEC Division of Air Resources, to MMCE (consultant to SC Holdings) dated April 6, 2011 (see Appendix B). The letter approved elimination of sampling and testing of the air stripper exhaust.

In October 2020, a Sensaphone remote monitoring system was installed for the groundwater treatment system. The Sensaphone system automatically sends the AECOM Project Manager and SC Holdings Project Manager electronic mail notification when power to the site is lost, or when pumps or the blower become non-operational. The AECOM Project Manager confirms receipt of the notification with the SC Holdings Project Manager and a service visit is scheduled promptly to address the notification and minimize downtime of the system.

A summary of semi-annual groundwater elevations measured in the groundwater monitoring wells and piezometers during 2024 is included in Table 1 - Summary of Groundwater Elevation Measurements. Semi-annual groundwater elevation contours for 2024 are plotted on Figures 2 and 3. Groundwater elevation data are next scheduled to be collected in April 2025 and will be included in the 2025/2026 PRR.

The contours show that the three extraction wells depress water levels in the trench below natural groundwater levels in that area of the site. The resulting depression in the groundwater table creates groundwater flow toward the collection trench. The measurements demonstrate that the collection trench is functioning as designed to restrict offsite flow and limit groundwater discharge to the South Branch of Smokes Creek.

VOC analytical test results of groundwater treatment system influent samples have historically shown o-chlorotoluene levels in higher concentrations than other organic compounds. Therefore, concentrations of o-chlorotoluene detected in groundwater treatment influent samples have been used to assess the performance of the treatment system in reducing organic compound concentrations in the groundwater. The o-chlorotoluene concentration data for influent groundwater samples was plotted versus time for the January 2003 through January 2025 sampling events (see Figure 4). The plot shows that the concentration of o-chlorotoluene in the influent groundwater samples has been reduced since initiation of treatment system operation. This indicates that the treatment system is meeting the remedial goal of reducing organic compound concentrations in the groundwater.

A comparison of the influent and effluent sample analytical results shows that the air stripper is effectively removing VOCs from the groundwater collected by the treatment system.

Annual Groundwater Monitoring

Pursuant to the May 2023 NYSDEC-approved revisions to sampling and reporting requirements, annual groundwater monitoring was not required in 2023. Groundwater samples were collected on an annual basis through 2022 and again most recently on September 25, 2024. Groundwater samples were collected from monitoring wells MW-3S, MW-7R, MW-8R, MW-9R, MW-13R, and MW-15R and analyzed by Eurofins Environment Testing (Amherst, NY) for the standard list of VOCs by EPA Method SW846 8260C. A summary of VOC detections for the annual 2024 groundwater-monitoring event is included as Table 2, Detection Summary. The complete 2024 groundwater sample analytical laboratory report is included as Attachment D. Historical concentration versus time trend plots for monitoring wells MW-3S, MW-8R, MW-9R, and MW-13R are included as Attachment E.

IV. O&M PLAN COMPLIANCE

The following activities were performed as part of the O&M Plan requirements:

Soil Vapor Extraction System

AECOM performed the following activity from February 16, 2024 through February 15, 2025 as part of monthly visits to the site:

- Visually observed each SVE passive vent riser for damage.

Groundwater Collection and Treatment System

AECOM performed the following activities from February 16, 2024 through February 15, 2025 as part of monthly O&M visits:

- Verified that each extraction well was running and performing as designed;
- Observed that each pump was operating, documented pumping rates, total gallons pumped and insured that high and low water controls are functioning as designed;
- As required by the sampling schedule, performed influent and effluent sample analytical testing;
- Observed that the air stripper was performing as designed;
- Performed monthly inspections of air stripper trays;
- Performed cleaning of air stripper trays on an every-other-month schedule to remove accumulated iron precipitate to promote optimum removal of VOCs; and,
- Prepared and submitted to NYSDEC on July 31. 2024, the 2024 semi-annual O&M report for the period March 2024 through July 2024 as required by the 2023 updated reporting schedule to NYSDEC.

The semi-annual O&M report submitted to NYSDEC provided further details on specific activities performed, analytical testing results, and observations made during the routine monthly O&M visits. Routine activities included general inspection and maintenance work performed on pumps, equipment, and sensors, as described in the monthly O&M inspection reports, during that period.

In addition, the following non-routine maintenance activities were also performed during this PRR reporting period:

- AECOM subcontractor Matrix Environmental Technologies, Inc. (Orchard Park, NY) (Matrix) performed routine periodic line jetting cleaning of the treated groundwater effluent discharge line from the treatment building to Smokes Creek outlet on April 23, 2024. This cleaning is conducted on an every-other-year schedule to remove iron fouling in the discharge line. Sediment generated during the line cleaning process was collected and placed on the onsite soil cap.
- During the AECOM site visit on February 4, 2025, system notifications for high water level in EW-1 and EW-2 were noted upon arrival for system cleaning. The team cleared the alarms and notified AECOM PM. AECOM PM scheduled a service visit for Matrix.
- On February 12, 2025, Matrix made a service visit to troubleshoot the notifications observed on February 4, 2025. Matrix evaluated extraction well EW-2 and determined the transducer was likely faulty and removed the transducer. EW-2 was left “OFF.” Matrix inspected extraction well EW-1 and EW-3 well head control panels and found nothing faulty.
- On February 13, 2025, Matrix informs AECOM that testing of EW-2 transducer was completed and the transducer was confirmed to be faulty. A replacement transducer is ordered.

In a letter dated February 11, 2025, NYSDEC provided acceptance of the 02/15/23 - 02/15/24 PRR and associated IC/EC Certification and provided additional comments to be addressed in future PRRs. Those additional comments are addressed in this PRR.

V. CONCLUSIONS AND RECOMMENDATIONS

Groundwater Collection and Treatment

A comparison of the monthly influent vs. effluent analytical test results indicates that the groundwater collection and treatment system continues to remove VOC contaminants from groundwater at the Chem-Trol site. A plot of the influent o-chlorotoluene concentration versus time (see Figure 4) indicates that the source contributing to groundwater VOC concentrations has been reduced to where the source influence on groundwater has decreased over time. While remaining well below initial / early operation concentrations, a relatively gradual increase from May 2016 through November 2022 had been observed, with concentrations since then returning to approximately the same range as 2016 through 2019 levels. This trend will continue to be monitored.

The semi-annual groundwater elevation data show that the groundwater collection system continues to contain groundwater contaminants and creates a gradient toward the groundwater collection wells and away from the South Branch of Smokes Creek.

Please call the undersigned at AECOM (716-856-5636) or Mr. Ryan Donovan (413-275-1522) if you have any questions or require any additional information after reviewing this report.

Sincerely yours,

James L. Kaczor

James L. Kaczor, P.G. (NY, IN)
Project Manager
james.kaczor@aecom.com

Enclosures (Tables 1 and 2, Figures 1 through 4)

Attachment A – 2024/2025 IC/EC Form
Attachment B – NYSDEC Approval Correspondence
Attachment C – August 2024 through February 2025 Inspection Logs and Monitoring Data
Attachment D – September 2024 Bi-Annual Groundwater Monitoring Analytical Report
Attachment E – Historical Trend Plots

cc: Ryan Donovan (SC Holdings, Inc.), electronic copy w/attachments
Megan Rivera (NYSDOH), electronic copy w/attachments
Edward M. Murphy, P.E. (AECOM), electronic copy w/attachments
60746785 Project File

TABLES

Table 1: Summary of Groundwater Elevations – 2024

Table 2 – Bi-Annual Groundwater Monitoring Results (Sep. 2024) (Detections Only)

TABLE 1

Chem-Trol 2024 Semi-Annual Water Levels

Pumping Wells		3Q Date 7/29/2024		4Q Date 9/25/2024	
Well ID	Monitoring Point (TIC)	Depth To Water (ft)	3rd Quarter Elevation (ft)	Depth To Water (ft)	4th Quarter Elevation (ft)
EW-1	624.07	23.34	600.73	25.18	598.89
EW-2	622.16	14.86	607.30	13.58	608.58
EW-3	621.10	22.08	599.02	20.00	601.10

East of Cap (North to South)

Well ID	Monitoring Point (TIC)	Depth To Water (ft)	3rd Quarter Elevation (ft)	Depth To Water (ft)	4th Quarter Elevation (ft)
MW-6S	638.54	11.63	626.91	12.86	625.68
MW-6R	638.64	19.22	619.42	18.15	620.49
P-1S	642.80	8.16	634.64	10.20	632.60
MW-1R	645.36	10.01	635.35	11.70	633.66
MW-1S	645.40	9.60	635.80	11.94	633.46
MW-7S	642.85	11.10	631.75	10.53	632.32
MW-7R	642.28	8.13	634.15	9.61	632.67

Center of Cap (North to South)

Well ID	Monitoring Point (TIC)	Depth To Water (ft)	3rd Quarter Elevation (ft)	Depth To Water (ft)	4th Quarter Elevation (ft)
P-5S	637.54	11.10	<624.05	13.49	624.05
P-5R	637.88	Dry	<617.48	Dry	<617.48
MW-5S	636.28	13.54	622.74	14.02	622.26
P-2R	646.96	NM	N/A	13.91	633.05
P-2S	646.44	NM	N/A	12.88	633.56
MW-2S	644.85	9.46	635.39	11.29	633.56

West of Cap (North to South)

Well ID	Monitoring Point (TIC)	Depth To Water (ft)	3rd Quarter Elevation (ft)	Depth To Water (ft)	4th Quarter Elevation (ft)
MW-4S	637.18	15.28	621.90	Dry	<621.58
MW-4R	637.02	29.82	607.20	Dry	<615.67
P-4S	636.54	15.94	620.60	Dry	<620.54
MW-3S	637.64	17.96	619.68	18.32	619.32
P-3R	639.92	19.68	620.24	19.60	620.32
P-3S	639.46	Blocked	N/A	19.84	619.62
OW-3R	638.78	23.92	614.86	24.07	614.71

West of Trench (North to South)

Well ID	Monitoring Point (TIC)	Depth To Water (ft)	3rd Quarter Elevation (ft)	Depth To Water (ft)	4th Quarter Elevation (ft)
OW-1FR	620.42	12.98	607.44	12.21	608.21
P97-5	613.65	6.51	607.14	5.79	607.86
MW-10S	615.15	Dry	<609.08	Dry	<609.08
MW-10R	615.47	7.85	607.62	7.44	608.03
P97-4	614.8	7.60	607.20	6.83	607.97
MW-8S	617.28	7.23	610.05	Blocked	N/A
MW-8R	617.38	9.77	607.61	9.29	608.09
P97-3	617.66	10.39	607.27	9.54	608.12
MW-9RD	619.13	6.02	613.11	5.92	613.21
MW-9R	619.17	11.86	607.31	10.99	608.18
MW-9S	619.91	Dry	<609.15	Dry	<609.15
OW-2FR	624.14	16.79	607.35	Dry	<610.9
P97-2	619.07	9.97	609.10	9.56	609.51
P97-1	619.97	9.31	610.66	9.22	610.75
MW-12R	621.59	9.17	612.42	10.79	610.80
MW-12S	621.17	Dry	<610.49	Dry	<611.67

West of Smokes Creek (North to South)

Well ID	Monitoring Point (TIC)	Depth To Water (ft)	3rd Quarter Elevation (ft)	Depth To Water (ft)	4th Quarter Elevation (ft)
MW-13R	615.14	8.28	606.86	7.70	607.44
MW-14R	618.55	5.42	613.13	5.78	612.77

NM - Not measured (diameter of water level probe > well ID)
N/A - Not available

TABLE 2

Detection Summary

Client: Waste Management
Project/Site: ChemTrol Site - Groundwater

Job ID: 480-223722-1

Client Sample ID: TB-092524 — Lab Sample ID: 480-223722-1

No Detections.

Client Sample ID: FD-092524 — Lab Sample ID: 480-223722-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
o-Chlorotoluene - DL	1100		34		ug/L	40		8260C	Total/NA

Client Sample ID: MW-13R — Lab Sample ID: 480-223722-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
o-Chlorotoluene	1400		34		ug/L	40		8260C	Total/NA

Client Sample ID: MW-15R — Lab Sample ID: 480-223722-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cyclohexane	31		5.0		ug/L	2		8260C	Total/NA
Methylcyclohexane	8.8		5.0		ug/L	2		8260C	Total/NA

Client Sample ID: MW-3S — Lab Sample ID: 480-223722-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
o-Chlorotoluene	77000		860		ug/L	1000		8260C	Total/NA

Client Sample ID: MW-7R — Lab Sample ID: 480-223722-6

No Detections.

Client Sample ID: MW-8R — Lab Sample ID: 480-223722-7

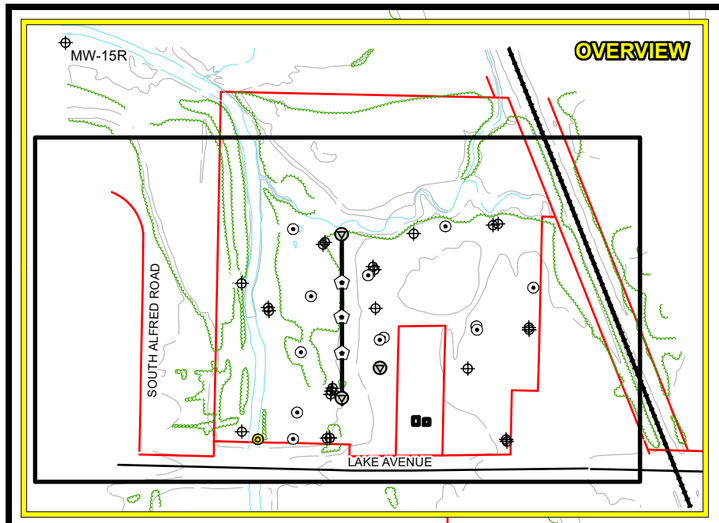
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
o-Chlorotoluene	100		5.0		ug/L	4		8260C	Total/NA

Client Sample ID: MW-9R — Lab Sample ID: 480-223722-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	160		5.0		ug/L	4		8260C	Total/NA
1,1-Dichloroethane	71		5.0		ug/L	4		8260C	Total/NA

This Detection Summary does not include radiochemical test results.

FIGURES



N

ON SITE TRIBUTARY OF SMOKES CREEK

SOUTH BRANCH OF SMOKES CREEK

GROUNDWATER COLLECTION TRENCH

WATER TREATMENT BUILDING

SOIL VAPOR EXTRACTION BUILDING

SOUTH ALFRED ROAD

LAKE AVENUE

P97-5
OW-1FR
MW-10S
MW-10R
MW-5S
P-5S
P-5R
MW-6S
MW-6R
MW-4S
MW-4R
P-4S
MW-13R
EW3
P97-4
P-1S
MW-8S
MW-8R
MW-3S
EW2
P-2R
P-2S
MW-1R
MW-1S
P-3R
P-3S
EW1
P97-3
MW-2S
OW-3R
MW-9RD
MW-9R
MW-9S
OW-2FR
P97-2
MW-14R
P97-1
MW-12R
MW-12S
MW-7S
MW-7R

640 630 620 610

Legend

- Extraction Well
- Monitoring Wel
- Observation Well
- Piezometer
- Effluent Sampling Location
- Edge of Water
- Property Line
- Existing Ground Elevation Contour

100 0 100 Feet

CHEM-TROL SITE PLAN

AECOM

FIGURE 1

L:\DCS\Projects\60526520_ChmTrl2017\900-CAD-GIS\920-GIS or Graphics\Arcmap\SITE PLAN (2025).mxd 3/5/2025

N

SOUTH ALFRED ROAD

ON SITE TRIBUTARY OF SMOKES CREEK

SOUTH BRANCH OF SMOKES CREEK

P97-5, 607.14

OW-1FR, 607.44

MW-10R, 607.62

MW-4R, 607.20

MW-13R, 606.86

EW3, 599.02

P97-4, 607.20

MW-8R, 607.61

EW2, 607.30

P97-3, 607.27

EW1, 600.73

MW-9R, 607.31

GROUNDWATER COLLECTION TRENCH

OW-2FR, 607.35

P97-2, 609.10

MW-14R, 613.13

P97-1, 610.66

MW-12R, 612.42

P-5R, Dry

MW-6R, 619.42

P-3R, 620.24

OW-3R, 614.86

P-2R, NM

MW-1R, 635.35

WATER TREATMENT BUILDING

SOIL VAPOR EXTRACTION BUILDING

MW-7R, 634.15

LAKE AVENUE

Legend

- Extraction Well
- Monitoring Well
- Observation Well
- Piezometer
- Groundwater Flow Direction
- Groundwater Elevation Contour
- Edge of Water
- Property Line
- Existing Ground Elevation Contour

MW-6R, 620.79
Location ID — Groundwater Elevation

NOTE:
NM - Not Monitored

100 0 100 Feet

CHEM-TROL
BEDROCK GROUNDWATER CONTOURS
JULY 29, 2024

AECOM

FIGURE 2

L:\DCS\Projects\60526520_ChmTrl2017\900-CAD-GIS\920-GIS or Graphics\Arcmap\THIRD QUARTER 2024 GW CONTOURS.mxd 7/31/2024

N

ON SITE TRIBUTARY OF SMOKES CREEK

SOUTH BRANCH OF SMOKES CREEK

SOUTH ALFRED ROAD

LAKE AVENUE

P97-5, 607.86

OW-1FR, 608.21

MW-10R, 608.03

P-5R, Dry

MW-6R, 620.49

MW-4R, Dry

MW-13R, 607.44

EW3, 601.10

P97-4, 607.97

MW-8R, 608.09

EW2, 608.58

P-3R, 620.32

P-2R, 633.05

MW-1R, 633.66

P97-3, 608.12

EW1, 598.89

OW-3R, 614.71

MW-9R, 608.18

GROUNDWATER COLLECTION TRENCH

OW-2FR, Dry

WATER TREATMENT BUILDING

SOIL VAPOR EXTRACTION BUILDING

P97-2, 609.51

MW-14R, 612.77

P97-1, 610.75

MW-12R, 610.80

MW-7R, 632.67

Legend

- Extraction Well
- Monitoring Well
- Observation Well
- Piezometer
- Groundwater Flow Direction
- Groundwater Elevation Contour
- Edge of Water
- Property Line
- Existing Ground Elevation Contour

MW-6R, 620.49
Location ID — Groundwater Elevation

100 0 100 Feet

CHEM-TROL
BEDROCK GROUNDWATER CONTOURS
SEPTEMBER 25, 2024

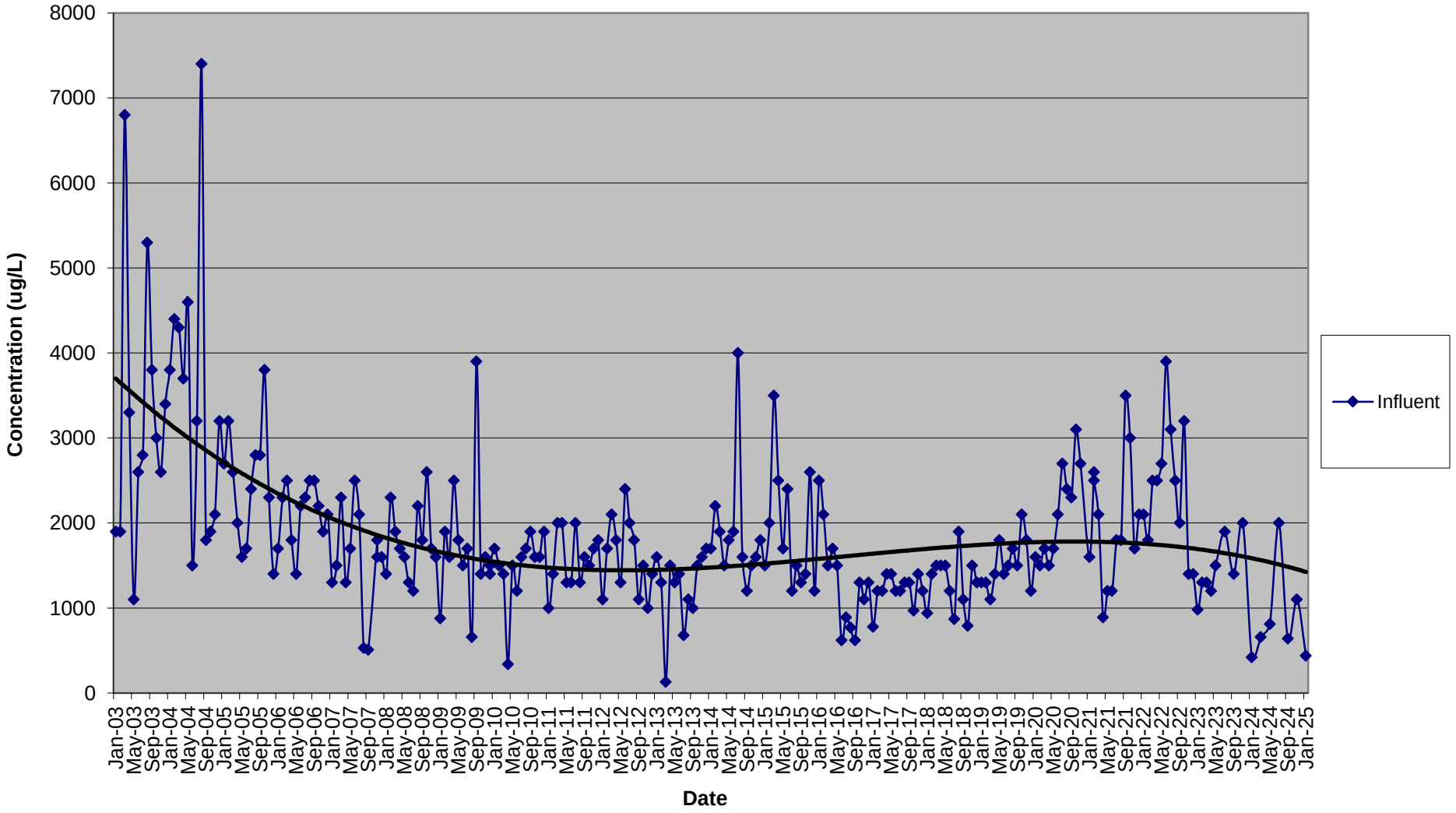
AECOM

FIGURE 3

L:\DCS\Projects\60526520_ChmTrl2017\900-CAD-GIS\920-GIS or Graphics\Arcmap\FOURTH QUARTER 2024 GW CONTOURS.mxd 3/5/2025

FIGURE 4

Chem-Trol Groundwater Treatment System
Influent o-Chlorotoluene Concentration
January 2003 - January 2025



ATTACHMENT A

Completed IC/EC Form

Enclosure 2
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Site Management Periodic Review Report Notice
Institutional and Engineering Controls Certification Form

Site Details **Box 1**

Site No. 915015

Site Name Chem-Trol

Site Address: Lake Avenue Zip Code: 14107
City/Town: Hamburg
County: Erie
Site Acreage: 17.520

Reporting Period: February 15, 2024 to February 15, 2025

	YES	NO
1. Is the information above correct?	X	☐
If NO, include handwritten above or on a separate sheet.		
2. Has some or all of the site property been sold, subdivided, merged, or undergone a tax map amendment during this Reporting Period?	☐	X
3. Has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))?	☐	X
4. Have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period?	☐	X
If you answered YES to questions 2 thru 4, include documentation or evidence that documentation has been previously submitted with this certification form.		
5. Is the site currently undergoing development?	☐	X

Box 2

	YES	NO
6. Is the current site use consistent with the use(s) listed below? Closed Landfill	X	☐
7. Are all ICs in place and functioning as designed?	X	☐

IF THE ANSWER TO EITHER QUESTION 6 OR 7 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.

A Corrective Measures Work Plan must be submitted along with this form to address these issues.

_____ _____
Signature of Owner, Remedial Party or Designated Representative Date

SITE NO. 915015 **Box 3**

Description of Institutional Controls

Parcel	Owner	Institutional Control
151.02-1-14.1	SC Holdlings Inc./Waste Management	Ground Water Use Restriction
		Monitoring Plan
		O&M Plan
		Landuse Restriction
		Building Use Restriction

The controls identified in the Declaration of Covenants and Restrictions, recorded with Erie County on March 25, 2004, include but are not limited to the following: The owner of the Property shall maintain the cap covering the Property by maintaining its grass cover, or after obtaining written approval from the Relevant Agency, by capping the Property with another material. The property is prohibited from being used for purposes other than for industrial or commercial use, excluding use for day care, child care and medical care; the use of groundwater underlying the property is prohibited without treatment to render it safe for drinking water or industrial purposes, except that the groundwater may be reasonably used as necessary to conduct tests to monitor contamination levels of the groundwater. These restrictive covenants are binding and shall run with the land.

Box 4

Description of Engineering Controls

Parcel	Engineering Control
151.02-1-14.1	Groundwater Treatment System
	Cover System
	Groundwater Containment
	Monitoring Wells
	Fencing/Access Control
	Leachate Collection

Remediation was completed in two phases consisting of Source Control Elements and Groundwater Control Elements. These elements are summarized as follows:

Source Control Elements:

1. Hot Spot Soils Removal.
2. Tributary Sediment Excavation/Disposal.
3. Site Soils Cover.
4. Soil Vapor Extraction. Passive state with one year evaluation starting January 2010. Passive state permanently approved on May 29, 2011.

Groundwater Control Elements:

1. Groundwater extraction from three extraction wells.
2. On-site groundwater treatment with discharge compliance monitoring.
2. Groundwater quality monitoring.

Groundwater intercept, extraction, treatment and discharge compliance monitoring. Periodic measuring of groundwater levels and plotting to develop groundwater contours and directional gradients. Annual groundwater quality monitoring to determine performance of remedy. Ongoing site management activities to continue with remedy and protection of public health and the environment.

Box 5

Periodic Review Report (PRR) Certification Statements

1. I certify by checking "YES" below that:

   a) the Periodic Review report and all attachments were prepared under the direction of, and reviewed by, the party making the Engineering Control certification;

   b) to the best of my knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program, and generally accepted engineering practices; and the information presented is accurate and compete.

YES	NO
X	☐

2. For each Engineering control listed in Box 4, I certify by checking "YES" below that all of the following statements are true:

   (a) The Engineering Control(s) employed at this site is unchanged since the date that the Control was put in-place, or was last approved by the Department;

   (b) nothing has occurred that would impair the ability of such Control, to protect public health and the environment;

   (c) access to the site will continue to be provided to the Department, to evaluate the remedy, including access to evaluate the continued maintenance of this Control;

   (d) nothing has occurred that would constitute a violation or failure to comply with the Site Management Plan for this Control; and

   (e) if a financial assurance mechanism is required by the oversight document for the site, the mechanism remains valid and sufficient for its intended purpose established in the document.

YES	NO
X	☐

IF THE ANSWER TO QUESTION 2 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.

A Corrective Measures Work Plan must be submitted along with this form to address these issues.

_____ _____

Signature of Owner, Remedial Party or Designated Representative Date

IC CERTIFICATIONS
SITE NO. 915015

Box 6

SITE OWNER OR DESIGNATED REPRESENTATIVE SIGNATURE

I certify that all information and statements in Boxes 1,2, and 3 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I Ryan Donovan (print name) at 600 New Ludlow Road,South Hadley, MA 01175 (print business address),

am certifying as Owner (Owner or Remedial Party)

for the Site named in the Site Details Section of this form.

Ryan Donovan
Signature of Owner, Remedial Party, or Designated Representative Rendering Certification

03/14/25
Date

EC CERTIFICATIONS

Box 7

Professional Engineer Signature

I certify that all information in Boxes 4 and 5 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I, Edward M. Murphy, PE, at AECOM, 50 Lakefront Blvd., Suite 111, Buffalo, NY 14202,
print name print business address

am certifying as a Professional Engineer for the Remedial Party.
(Owner or Remedial Party)

Signature of Professional Engineer, for the Owner or Remedial Party, Rendering Certification	Stamp (Required for PE)	3/13/25 Date

ATTACHMENT B

NYSDEC Approval Correspondence

8275/Tech 4.2

New York State Department of Environmental Conservation
50 Wolf Road, Albany, New York, 12233-3505

John P. Cahill
Commissioner

JWH

MEMORANDUM

RECEIVED
MAR 06 2001
NYSDEC - REG. 9
X REL FOIL UNREL

TO: John Hyden, NYSDEC Region 9, DER
FROM: Sudhir Mahatma, CSS, BWP, DOW SM
SUBJECT: Chem-Trol Site # 9-15-015
DRAINAGE BASIN: 01-04
DATE: March 2, 2001

In response to your request received on May 26,1999 by Angus Eaton and a letter of Jan. 29,2001 from Thomas R. Heins of McMahon & Mann to John W. Hyden of NYSDEC, Buffalo, attached please find revised effluent criteria for the above noted groundwater remediation discharge.

The DOW does not have any regulatory authority over a discharge from a State, PRP, or Federal Superfund Site. DER will be responsible for ensuring compliance with the attached effluent criteria and approval of all engineering submissions. Footnote 1 identifies the Bureau of Site Control as the place to send all effluent results, engineering submissions and modification requests. The Regional Water Engineer should be kept appraised of the status of this discharge and, in accordance with the attached criteria, receive a copy of the effluent results for informational purposes.

If you have any questions, please call me at 518-457-9602.

Attachments (Effluent Criteria, General Conditions)

cc: John McMahon, Regional Water Engineer, R-9(w/Effluent Criteria)
A. Eaton, DOW (w/Effluent Criteria)
Terry Olmsted, DOW (w/Effluent Criteria)
Craig Jackson, DER, Rm: 348

Post-it® Fax Note 7671	Date 3/23/01	# of pages ▶ 3
To Tom Heins	From Jack Hyden	
Co./Dept.	Co.	
Phone #	Phone # 716/851-7220	
Fax # 834-8934	Fax # 851-7226	

91-2.0-2a (1/89)

Site No.:9-15-015
Part 1, Page 1 of 2

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning August 1999

and lasting until August 2004

the discharges from the treatment facility to Smokes Creek, water index number E-2-1 , Class C , RECEIVING WATER shall be limited and monitored by the operator as specified below:

Outfall Number and Parameter	Discharge Limitations		Units	Minimum Monitoring Requirements	
	Daily Avg.	Daily Max		Measurement Frequency	Sample Type
Outfall 001 - Treated Groundwater Remediation Discharge:					
Flow	72000	144000	GPD	Continuous	Meter
pH (range)	6.5 to 8.5		SU	Weekly	Grab
Total Dissolved Solids	Monitor	2500	mg/l	Weekly (7)	Grab
Total Suspended Solids	Monitor	20	mg/l	Weekly (7)	Grab
Chloroethane	Monitor	10	µg/l	Weekly (7)	Grab
1,1 Dichloroethane	Monitor	10	µg/l	Weekly (7)	Grab
1,1 Dichloroethene	Monitor	10	µg/l	Weekly (7)	Grab
1,1,1 Trichloroethane	Monitor	10	µg/l	Weekly (7)	Grab
Trichloroethene	Monitor	10	µg/l	Weekly (7)	Grab
Benzene	Monitor	5	µg/l	Weekly (7)	Grab
Toluene	Monitor	5	µg/l	Weekly (7)	Grab
o-Chlorotoluene	Monitor	10	µg/l	Weekly (7)	Grab
Chlorobenzene	Monitor	10	µg/l	Weekly (7)	Grab
cis- 1,2 Dichloroethene	Monitor	10	µg/l	Weekly (7)	Grab
Aluminum	Monitor	4000	µg/l	Weekly (7)	Grab
Boron	Monitor	1800	µg/l	Weekly (7)	Grab
Iron	Monitor	700	µg/l	Weekly (7)	Grab
Lead	Monitor	5.6	µg/l	Weekly (7)	Grab
Manganese	Monitor	2000	µg/l	Weekly (7)	Grab
Zinc	Monitor	110	µg/l	Weekly (7)	Grab

91-29-2a (1/89)

Site No.:9-15-015
Part 1, Page 2 of 2

Additional Conditions:

(1) Discharge is not authorized until such time as an engineering submission showing the method of treatment is approved by the Department. The discharge rate may not exceed the effective or design treatment system capacity. All monitoring data, engineering submissions and modification requests must be submitted to:

Chief - Operation Maintenance and Support Section
Bureau of Hazardous Site Control
Division of Environmental Remediation
NYSDEC
50 Wolf Road
Albany, N.Y. 12233-7010

With a copy sent to:

John McMahon, RWE, R-9
NYS Dept. of Env. Conservation
270 Michigan Avenue
Buffalo, NY 14203-2999

(2) Only site generated wastewater is authorized for treatment and discharge.

(3) Authorization to discharge is valid only for the period noted above but may be renewed if appropriate. A request for renewal must be received 6 months prior to the expiration date to allow for a review of monitoring data and reassessment of monitoring requirements.

(4) Both concentration (mg/l or µg/l) and mass loadings (lbs/day) must be reported to the Department for all parameters except flow and pH.

(5) Any use of corrosion/scale inhibitors or biocidal-type compounds used in the treatment process must be approved by the department prior to use.

(6) This discharge and adminstration of this discharge must comply with the attached General Conditions.

(7) The minimum measurement frequency for all parameters except flow and pH shall be MONTHLY following a period of 24 consecutive weekly sampling events showing no exceedances of stated discharge limitations. If discharge limitation of any parameter is exceeded, the measurement frequency for all parameters shall again be WEEKLY, until a period of 8 (eight) consecutive sampling events showing no exceedances at which point MONTHLY monitoring may resume.

82705 / Chem-Trol / Tech 4.1

New York State Department of Environmental Conservation
Division of Environmental Remediation, Region 9
270 Michigan Avenue, Buffalo, New York, 14203-2999
Phone: (716) 851-7220 • **FAX:** (716) 851-7226
Website: www.dec.ny.gov

Alexander B. Grannis
Commissioner

July 27, 2007

Mr. David M. Moreira
Project Manager, Northeast Group
S.C. Holdings, Inc.
4 Liberty Lane West
Hampton, New Hampshire 03842

Dear Mr. Moreira:

December 2005 Discharge Evaluation Report
Chem-Trol Site, Registry No. 915015
Hamburg, Erie County

The Department has completed a detailed review of the December 2005 Discharge Evaluation Report submitted by McMahon & Mann Consulting Engineers, P.C. (MMCE) on behalf of S.C. Holdings, Inc. This report was submitted at the request of the Department (letter dated February 27, 2004, from Glenn M. May to David M. Moreira) to present the results of MMCE's evaluation of the Chem-Trol wastewater treatment system's ability to remove orthochlorotoluene (OCT) and iron to acceptable discharge levels. Based upon this evaluation, MMCE requested modification to the discharge limits for OCT, iron, aluminum, boron, lead, manganese, zinc, and total dissolved solids. The rational for these requests, along with the Department's responses, are summarized as follows:

OCT: The treatment system effectively reduces OCT to levels consistent with the discharge limits when the air stripper is cleaned with HCl every three to four months, although OCT effluent concentrations occasionally exceed the 10 µg/l discharge limit. MMCE requests a modification of the discharge limit for OCT to 25 µg/l.

The air stripper, when periodically cleaned with HCl, is capable of consistently achieving the current discharge limit. As a result, the Department denies MMCE's request to modify the discharge limit for OCT to 25 µg/l.

Iron: The iron removal filter is not capable of treating wastewater to the discharge limit of 0.7 mg/l. MMCE requests a modification of the discharge limit for iron to 3.0 mg/l based upon iron concentrations in ambient groundwater and surface water samples, and the presence of ferric iron in the discharged water.

The groundwater monitoring well data provided in the Discharge Evaluation Report indicates that the concentration of iron in ambient groundwater ranges from 1.73 to 11.7 mg/l. Ambient surface water samples collected from an on-site tributary to the South Branch of Smokes Creek also contain iron at concentrations (3.13 to 4.48 mg/l) that exceed the current discharge limit. Further, as the form of iron in the discharge water (ferric) is already oxidized, there would be limited reduction in oxygen levels in the creek. In addition, iron staining at the discharge pipe has not been observed since the discharge water was diverted to the South Branch of Smokes Creek in February 2004. As a result, the Department agrees with the request to increase the iron discharge limit to 3.0 mg/l, recognizing that the need to treat groundwater captured by the site's extraction system to less than ambient conditions is not necessary. This modification will need to be reviewed, however, if iron staining is observed in the future.

Aluminum, Boron, Lead, Manganese, Zinc and Total Dissolved Solids: These parameters were generally not detected, or were detected at concentrations below the discharge limits. MMCE requests that these compounds be removed from the list of parameters analyzed in the influent and effluent samples.

Aluminum, boron, lead, manganese, zinc, and total dissolved solids are not indicators of treatment system performance. As a result, the Department agrees with the request to eliminate these compounds from the compliance monitoring program.

Should you have any questions, please feel free to contact me at (716) 851-7220.

Sincerely yours,

Glenn M. May

Glenn M. May, CPG
Environmental Geologist II

GMM:lg

cc: Mr. Gregory Sutton, NYSDEC, Region 9
Mr. Brian Sadowski, NYSDEC, Region 9
Mr. James Bojarski, McMahon & Mann Consulting Engineers, P.C.

New York State Department of Environmental Conservation
Division of Environmental Remediation, Region 9
270 Michigan Avenue, Buffalo, New York 14203-2915
Phone: (716) 851-7220 • **Fax:** (716) 851-7226
Website: www.dec.ny.gov

RECEIVED
MAR 3 1 2011

Joe Martens
Commissioner

March 29, 2011

Mark Snyder, P.E.
Waste Management
425 Perinton Parkway
Fairport, New York 14450-9104

Dear Mr. Snyder:

2010 Periodic Review Report
Chem-Trol Site, Registry No. 915015
Blasdell, Erie County

The New York State Department of Environmental Conservation (NYSDEC) is in receipt of the 2010 Periodic Review Report (PRR) submitted on February 10, 2011 by McMahon & Mann Consulting Engineers, P.C. (McMahon & Mann), on behalf of SC Holdings, Inc. This report: (1) describes the operation and maintenance activities completed during 2010 on the groundwater collection and treatment system; (2) describes the activities completed during 2010 to evaluate the passive operation of the SVE system; (3) presents the analytical results of groundwater samples collected in October 2010; (4) evaluates the SVE and groundwater collection and treatment systems for compliance with the 1996 ROD; (5) contains a signed Institutional and Engineering Controls (IC/EC) Certification Form; and (6) makes recommendations regarding the future operation of the SVE and groundwater collection and treatment systems. Specifically, McMahon & Mann recommends that: (1) monthly sampling of the groundwater treatment air stripper exhaust be eliminated; and (2) that active operation of the SVE system permanently cease.

Information contained in the 2010 PRR indicates that the SVE and groundwater collection and treatment systems are operating effectively and remain protective of public health and the environment. This letter, therefore, transmits formal NYSDEC approval of the 2010 PRR for the Chem-Trol Site. With this approval, please send us an electronic copy of the 2010 PRR.

Regarding McMahon & Mann's recommendations, I understand that McMahon & Mann has contacted the NYSDEC's Division of Air in Region 9 concerning the elimination of the monthly air stripper sampling. Please copy me on all correspondence to the Division of Air regarding this issue and the outcome of said correspondence.

The NYSDEC concurs with McMahon & Mann's recommendations to permanently cease the active operation of the SVE system. It is our understanding that passive venting of the SVE system laterals will continue in the future.

Should you have any questions, please feel free to contact me at (716) 851-7220.

Sincerely yours,

Glenn M. May, CPG
Environmental Geologist II

GMM:sz

ecc: Mr. Gregory Sutton, NYSDEC, Region 9
Mr. Alfred Carlacci, NYSDEC, Region 9
Mr. Brian Sadowski, NYSDEC, Region 9
Mr. Alan Zylinski, NYSDEC, Region 9
Mr. James Bojarski, McMahon & Mann

New York State Department of Environmental Conservation
Division of Air Resources, Region 9
270 Michigan Avenue, Buffalo, New York 14203-2915
Phone: (716) 851-7130 • **Fax:** (716) 851-7009
Website: www.dec.ny.gov

Joe Martens
Commissioner

April 26, 2011

Mr. John A. Minichiello, CPESC, CPSWQ
McMahon & Mann Consulting Engineers, P.C.
2495 Main Street, Suite 432
Buffalo, New York 14214

Dear Mr. Minichiello:

Chem-Trol Site, Registry No. 9-15-015
Blasdell, Erie County
Request to Eliminate Air Stripper Emissions Testing

The New York State Department of Environmental Conservation (Department) received a report requesting the elimination of the sampling and analytical testing of the air stripper exhaust associated with the groundwater collection and treatment system at the Chem-Trol Site. This report was submitted on April 6, 2011 by McMahon & Mann Consulting Engineers, P.C. (MMCE), on behalf of SC Holdings, Inc. After review of the report, the Department approves the request because the analytical data indicates that concentrations of o-chlorotoluene in the influent to the groundwater treatment system have stabilized.

Should you have any questions, please feel free to contact me at (716) 851-7130.

Sincerely yours,

Alan J. Zylinski, P.E.
Environmental Engineer II

AJZ:ed

ecc: Mr. Gregory Sutton, NYSDEC, Region 9
Mr. Alfred Carlacci, NYSDEC, Region 9
Mr. Brian Sadowski, NYSDEC, Region 9
Mr. Glenn May, NYSDEC, Region 9

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Environmental Remediation, Region 9
700 Delaware Avenue, Buffalo, NY 14209
P: (716) 851-7220 | F: (716) 851-7275
www.dec.ny.gov

May 4, 2023

Mr. Ryan Donovan, District Manager
SC Holdings, Inc.
600 New Ludlow Road
South Hadley, MA 01075

2021 Periodic Review Report
Chem-Trol, Site No. 915015
Blasdell, Erie County

Dear Mr. Donovan:

The New York State Department of Environmental Conservation (NYSDEC) has reviewed the Periodic Review Report (PRR) and IC/EC Certification for the period from February 15, 2022, to February 15, 2023. This PRR proposes a reduction in periodic monitoring requirements, which are summarized as follows:

- **Treated groundwater influent and effluent sampling**: Reduce the required monitoring from monthly to every other month. System cleanings would be performed on non-sample months to ensure a site visit is made and to monitor the operation of the system.

- **Annual groundwater monitoring**: Reduce long-term groundwater monitoring of the six wells from annual to bi-annual (every other year). Given the stability of these parameters, bi-annual sampling would continue to provide an adequate assessment of the stability of the groundwater recovery and treatment system.

- **Groundwater level gauging**: Reduce from quarterly to semi-annually in April and October. Groundwater contour figures would be prepared and submitted with the monitoring reports.

- **Periodic reporting**: A change to semi-annual reporting is proposed, to include system sampling, inspections, and groundwater contours for the reporting period.

The Department hereby accepts the PRR and associated Certification, and approves the proposed reduction in periodic monitoring requirements.

The frequency of Periodic Reviews for this site is one year, so your next PRR is due in March 2024. You will receive a reminder letter and updated certification form prior to that due date. Please note that if you do not receive the reminder notice, the next PRR including the signed certification form is still due on the date specified above.

Should you have any questions, please contact me at 716-851-7220 or via e-mail at: glenn.may@dec.ny.gov.

Sincerely,

Glenn M. May

Glenn M. May, PG
Professional Geologist I

ec: Stanley Radon, NYSDEC, Buffalo
Andrea Caprio, NYSDEC, Buffalo
James Kaczor, AECOM, Buffalo

ATTACHMENT C

August 2024 – February 2025 Treatment System Influent/Effluent Monitoring Data Tables, Site Inspection Checklists, and Laboratory Reports

Table 1
September 24, 2024 Summary of Influent and Effluent Data

Chem-Trol Site
Town of Hamburg, New York

Parameters	Concentration				Mass Loading		
	Influent	Effluent	Discharge Limitations	Units	Effluent	Discharge Limitations	Units
Flow*	2,970	2,970	144,000	gpd	NA	NA	NA
pH	6.7	7.7	6.5 to 8.5	standard units	NA	NA	NA
Toluene	< 9.1	< 5	5	ug/L	< 0.0001	0.006	lbs/day
Chlorobenzene	< 9.5	< 5	10	ug/L	< 0.0001	0.012	lbs/day
cis-1,2-Dichloroethene	< 11	< 5	10	ug/L	< 0.0001	0.012	lbs/day
Benzene	< 12	< 5	5	ug/L	< 0.0001	0.006	lbs/day
1,1,1-Trichloroethane	< 7.7	< 5	10	ug/L	< 0.0001	0.012	lbs/day
Chloroethane	26	< 5	10	ug/L	< 0.0001	0.012	lbs/day
1,1-Dichloroethane	23	< 5	10	ug/L	< 0.0001	0.012	lbs/day
1,1-Dichloroethene	< 17	< 5	10	ug/L	< 0.0001	0.012	lbs/day
Trichloroethene	< 12	< 5	10	ug/L	< 0.0001	0.012	lbs/day
o-Chlorotoluene	640	< 5	10	ug/L	< 0.0001	0.012	lbs/day
Iron - Total	1,270	218	3,000	ug/L	0.01	3.61	lbs/day
TSS	< 4	< 4	20	mg/L	< 0.10		lbs/day

Notes:

*1) **Bold** typeface denotes exceedance of treatment requirements in the effluent sample.*

2) < indicates Not Detected at or above the laboratory reporting limit.

3) NA indicates Not Applicable.

4) "J" indicates an estimated concentration below the method detection limit.

5) E - Estimated Value, result above calibration curve

6) D - Dilution

7) Revision of monitoring parameters (inorganics and TSS) and discharge limitation (iron) approved by NYSDEC letter dated July 27, 2007.

** Average daily flow as measured July 23, 2024 through September 24, 2024.*

Table 2
September 24, 2024 Summary of Influent and Effluent Data

Chem-Trol Site
Town of Hamburg, New York

Instrumentation/Readings:	Current Report 9/24/2024	units	Prior Report 7/23/2024
EW-1			
Pumping Rate	1.70	GPM	2.40
Water Level Above Transducer	153	Inches	181
Flow Meter Reading	NW	gallons	NW
EW-2			
Pumping Rate	0.0	GPM	0.4
Water Level Above Transducer	168	Inches	173
Flow Meter Reading	28,543,853	gallons	28,543,853
EW-3			
Pumping Rate	0.0	GPM	0.2
Water Level Above Transducer	118	Inches	201
Flow Meter Reading	NW	gallons	NW
Air Stripper			
Stripper Blower Pressure	NW	inches H_2O	NW
Effluent Flow			
Total System Meter Reading	77,560,690	gallons	77,379,490
Average System Flow Since Prior Report	2,970	gpd	
	123.8	gph	
	2.1	gpm	
Influent o-Chlorotoluene concentration	640	ug/L	
Current month mass removal	0.4	kilograms	

Note: NA indicates Not Available.
NW - Not working
ug/L - micrograms per liter

Table 1
November 12, 2024 Summary of Influent and Effluent Data

Chem-Trol Site
Town of Hamburg, New York

Parameters	Concentration				Mass Loading		
	Influent	Effluent	Discharge Limitations	Units	Effluent	Discharge Limitations	Units
Flow*	2,752	2,752	144,000	gpd	NA	NA	NA
pH	7.0	7.8	6.5 to 8.5	standard units	NA	NA	NA
Toluene	< 9.1	< 5	5	ug/L	< 0.0001	0.006	lbs/day
Chlorobenzene	< 9.5	< 5	10	ug/L	< 0.0001	0.012	lbs/day
cis-1,2-Dichloroethene	< 11	< 5	10	ug/L	< 0.0001	0.012	lbs/day
Benzene	< 12	< 5	5	ug/L	< 0.0001	0.006	lbs/day
1,1,1-Trichloroethane	< 7.7	< 5	10	ug/L	< 0.0001	0.012	lbs/day
Chloroethane	< 17	< 5	10	ug/L	< 0.0001	0.012	lbs/day
1,1-Dichloroethane	19	< 5	10	ug/L	< 0.0001	0.012	lbs/day
1,1-Dichloroethene	< 17	< 5	10	ug/L	< 0.0001	0.012	lbs/day
Trichloroethene	< 12	< 5	10	ug/L	< 0.0001	0.012	lbs/day
o-Chlorotoluene	1,100	< 5	10	ug/L	< 0.0001	0.012	lbs/day
Iron - Total	1,150	1,050	3,000	ug/L	0.02	3.61	lbs/day
TSS	< 4	18.8	20	mg/L	0.43		lbs/day

Notes:

*1) **Bold** typeface denotes exceedance of treatment requirements in the effluent sample.*

2) < indicates Not Detected at or above the laboratory reporting limit.

3) NA indicates Not Applicable.

4) "J" indicates an estimated concentration below the method detection limit.

5) E - Estimated Value, result above calibration curve

6) D - Dilution

7) Revision of monitoring parameters (inorganics and TSS) and discharge limitation (iron) approved by NYSDEC letter dated July 27, 2007.

** Average daily flow as measured September 24, 2024 through November 12, 2024.*

Table 2
November 12, 2024 Summary of Influent and Effluent Data

Chem-Trol Site
Town of Hamburg, New York

Instrumentation/Readings:	Current Report 11/12/2024	units	Prior Report 9/24/2024
EW-1			
Pumping Rate	1.80	GPM	1.70
Water Level Above Transducer	186	Inches	153
Flow Meter Reading	NW	gallons	NW
EW-2			
Pumping Rate	0.3	GPM	0.0
Water Level Above Transducer	182	Inches	168
Flow Meter Reading	28,543,853	gallons	28,543,853
EW-3			
Pumping Rate	0.5	GPM	0.0
Water Level Above Transducer	113	Inches	118
Flow Meter Reading	NW	gallons	NW
Air Stripper			
Stripper Blower Pressure	NW	inches H_2O	NW
Effluent Flow			
Total System Meter Reading	77,692,765	gallons	77,560,690
Average System Flow Since Prior Report	2,752	gpd	
	114.6	gph	
	1.9	gpm	
Influent o-Chlorotoluene concentration	1,100	ug/L	
Current month mass removal	0.5	kilograms	

Note: NA indicates Not Available.
NW - Not working
ug/L - micrograms per liter

Table 1
January 8, 2025 Summary of Influent and Effluent Data

Chem-Trol Site
Town of Hamburg, New York

Parameters	Concentration				Mass Loading		
	Influent	Effluent	Discharge Limitations	Units	Effluent	Discharge Limitations	Units
Flow*	4,225	4,225	144,000	gpd	NA	NA	NA
pH	7.7	7.77	6.5 to 8.5	standard units	NA	NA	NA
Toluene	< 5	< 5	5	ug/L	< 0.0002	0.006	lbs/day
Chlorobenzene	< 5	< 5	10	ug/L	< 0.0002	0.012	lbs/day
cis-1,2-Dichloroethene	3.1	< 5	10	ug/L	< 0.0002	0.012	lbs/day
Benzene	0.87 J	< 5	5	ug/L	< 0.0002	0.006	lbs/day
1,1,1-Trichloroethane	4.8	< 5	10	ug/L	< 0.0002	0.012	lbs/day
Chloroethane	27	< 5	10	ug/L	< 0.0002	0.012	lbs/day
1,1-Dichloroethane	44	1.6	10	ug/L	0.0001	0.012	lbs/day
1,1-Dichloroethene	2.2	< 5	10	ug/L	< 0.0002	0.012	lbs/day
Trichloroethene	3.1	< 5	10	ug/L	< 0.0002	0.012	lbs/day
o-Chlorotoluene	440	0.99 J	10	ug/L	0.0000	0.012	lbs/day
Iron - Total	2,960	708	3,000	ug/L	0.0250	3.61	lbs/day
TSS	5	10	20	mg/L	0.3530		lbs/day

Notes:

*1) **Bold** typeface denotes exceedance of treatment requirements in the effluent sample.*

2) < indicates Not Detected at or above the laboratory reporting limit.

3) NA indicates Not Applicable.

4) "J" indicates an estimated concentration below the method detection limit.

5) E - Estimated Value, result above calibration curve

6) D - Dilution

7) Revision of monitoring parameters (inorganics and TSS) and discharge limitation (iron) approved by NYSDEC letter dated July 27, 2007.

** Average daily flow as measured November 12, 2024 through January 8, 2025.*

Table 2
January 8, 2025 Summary of Influent and Effluent Data

Chem-Trol Site
Town of Hamburg, New York

Instrumentation/Readings:	Current Report 1/8/2025	units	Prior Report 11/12/2024
EW-1			
Pumping Rate	2.20	GPM	1.80
Water Level Above Transducer	220	Inches	186
Flow Meter Reading	NW	gallons	NW
EW-2			
Pumping Rate	0.8	GPM	0.3
Water Level Above Transducer	203	Inches	182
Flow Meter Reading	28,543,853	gallons	28,543,853
EW-3			
Pumping Rate	0.0	GPM	0.5
Water Level Above Transducer	163	Inches	113
Flow Meter Reading	NW	gallons	NW
Air Stripper			
Stripper Blower Pressure	NW	inches H_2O	NW
Effluent Flow			
Total System Meter Reading	77,929,350	gallons	77,692,765
Average System Flow Since Prior Report	4,225	gpd	
	176.0	gph	
	2.934	gpm	
Influent o-Chlorotoluene concentration	440	ug/L	
Current month mass removal	0.394	kilograms	

Note: NA indicates Not Available.
NW - Not working
ug/L - micrograms per liter

Operation, Maintenance & Monitoring Checklist

Groundwater Treatment System
CHEM-TROL Site
Town of Hamburg, New York

This summary inspection checklist is to be completed during each site inspection. Note all items, which require repair or maintenance. Use the last page to note any additional comments or unusual events.

General

Service by: C. Horrocks, C. Finn and D. VanMarter Weather/Temperature: Partly Cloudy, 72°F
Date: 8/7/2024 Arrival Time: 0800 Departure Time: 13:00

Reason for Service: Inspect system, clean system

Inspection Items:	OK:	Comments:
Site Appearance/Condition	X	See Notes/Explanations section.
Building Exterior		
Overhead Door	X	Wood lintel and metal trim repaired.
Siding	X	Metal trim repaired.
Roof and Discharge Pipe	X	
Building Interior		
Indication of Spills or Leaks	X	
Building Heater	X	Turned On
Phone System	X	Disconnected
Exhaust Fan		Could not get fan to work.
Fire Extinguisher	X	
First Aid & Eye Wash	X	

Groundwater Treatment System

Air Stripper	**X**	
Iron Removal Filter	**NA**	As of June 2021, there is no longer an iron removal filter tank.
Flow Meters	**X**	See Notes/Explanations section.
Gauges	**X**	
Stripper Blower	**X**	
Indication of Alarm	**X**	

Groundwater Treatment Wells

EW-1 Pump	**X**	
EW-1 Transducer	**X**	
EW-1 Flow Meter		EW-1 flow meter/totalizer screen no longer functioning.
EW-2 Pump	**X**	
EW-2 Transducer	**X**	
EW- 2 Flow Meter	**X**	
EW-3 Pump	**X**	
EW-3 Transducer	**X**	
EW-3 Flow Meter		EW-3 flow meter/totalizer screen no longer functioning.

Effluent Discharge

Outfall	**X**	Flowing
Cleanout	**X**	

Instrumentation/Readings:

EW-1

Pumping Rate	UNK GPM (see Notes section)
Water Level Above Transducer	173 Inches
Flow Meter Reading	Not Working Gallons

EW-2

Pumping Rate	UNK GPM (see Notes section)
Water Level Above Transducer	179 Inches
Flow Meter Reading	28,543,853 Gallons

EW-3

Pumping Rate	UNK GPM (see Notes section)
Water Level Above Transducer	126 Inches
Flow Meter Reading	Not Working Gallons

Air Stripper

Stripper Blower Pressure (Panel)	Broken Inches H2O
Stripper Blower Pressure (Stripper)	Broken Inches H2O

Effluent Flow

Total System Meter Reading	77,429,796 Gallons

Influent/Effluent Sampling

No Sampling was performed.

Notes/Explanations
(Please include any additional information on those items that require attention as indicated above.)

The system was on upon arrival. Shut down the system and turned the main breaker off to reboot the computer. Upon restarting the system, the main computer screen reset and was functioning properly.

Upon the completion of the cleaning of the system and shed, the system was successfully turned back on. Total system flow was timed at 3.2 gpm on the system totalizer flow meter.

The most recent round of water levels (3Q2024) was collected July 29, 2023.

The air stripper trays were last mechanically cleaned today, August 7, 2024.

Operation, Maintenance & Monitoring Checklist

Groundwater Treatment System
CHEM-TROL Site
Town of Hamburg, New York

This summary inspection checklist is to be completed during each site inspection. Note all items, which require repair or maintenance. Use the last page to note any additional comments or unusual events.

General

Service by: C. Horrocks, T. Urban and D. VanMarter Weather/Temperature: Sunny, 80°F
Date: 9/13/2024 Arrival Time: 0730 Departure Time: 13:30

Reason for Service: Inspect system, clean system

Inspection Items:	OK:	Comments:
Site Appearance/Condition	X	See Notes/Explanations section.
Building Exterior		
Overhead Door	X	Wood lintel and metal trim repaired.
Siding	X	Metal trim repaired.
Roof and Discharge Pipe	X	
Building Interior		
Indication of Spills or Leaks	X	
Building Heater	X	Turned Off
Phone System	X	Disconnected
Exhaust Fan		Could not get fan to work.
Fire Extinguisher	X	
First Aid & Eye Wash	X	

Groundwater Treatment System

Air Stripper	**X**	
Iron Removal Filter	**NA**	As of June 2021, there is no longer an iron removal filter tank.
Flow Meters	**X**	See Notes/Explanations section.
Gauges	**X**	
Stripper Blower	**X**	
Indication of Alarm	**X**	

Groundwater Treatment Wells

EW-1 Pump	**X**	
EW-1 Transducer	**X**	
EW-1 Flow Meter		EW-1 flow meter/totalizer screen no longer functioning.
EW-2 Pump	**X**	
EW-2 Transducer	**X**	
EW- 2 Flow Meter	**X**	
EW-3 Pump	**X**	
EW-3 Transducer	**X**	
EW-3 Flow Meter		EW-3 flow meter/totalizer screen no longer functioning.

Effluent Discharge

Outfall	**X**	Flowing
Cleanout	**X**	

Instrumentation/Readings:

EW-1

Pumping Rate	1.6 GPM (see Notes section)
Water Level Above Transducer	160 Inches
Flow Meter Reading	Not Working Gallons

EW-2

Pumping Rate	0.3 GPM (see Notes section)
Water Level Above Transducer	175 Inches
Flow Meter Reading	28,543,853 Gallons

EW-3

Pumping Rate	0.0 GPM (see Notes section)
Water Level Above Transducer	125 Inches
Flow Meter Reading	Not Working Gallons

Air Stripper

Stripper Blower Pressure (Panel)	Broken Inches H2O
Stripper Blower Pressure (Stripper)	Broken Inches H2O

Effluent Flow

Total System Meter Reading	77,530,814 Gallons

Influent/Effluent Sampling

No Sampling was performed.

Notes/Explanations
(Please include any additional information on those items that require attention as indicated above.)

The system was on upon arrival. Shut down the system and turned the main breaker off for cleaning.

Upon the completion of the cleaning of the system and shed, the system was successfully turned back on. Total system flow was timed at 4.0 gpm on the system totalizer flow meter.

The most recent round of water levels (3Q2024) was collected July 29, 2024.

The air stripper trays were last mechanically cleaned today, September 13, 2024.

Operation, Maintenance & Monitoring Checklist

Groundwater Treatment System
CHEM-TROL Site
Town of Hamburg, New York

This summary inspection checklist is to be completed during each site inspection. Note all items, which require repair or maintenance. Use the last page to note any additional comments or unusual events.

General

Service by: Tom Urban Weather/Temperature: Partly sunny, calm, 70°F
Date: 9/24/2024 Arrival Time: 8:00 Departure Time: 9:00

Reason for Service: Inspect system, perform monthly sampling

Inspection Items:	OK:	Comments:
Site Appearance/Condition	X	See Notes/Explanations section.
Building Exterior		
Overhead Door	X	
Siding	X	
Roof and Discharge Pipe	X	
Building Interior		
Indication of Spills or Leaks	X	
Building Heater	X	Turned Off
Phone System	X	Disconnected
Exhaust Fan		Could not get fan to work.
Fire Extinguisher	X	
First Aid & Eye Wash	X	

Groundwater Treatment System

Air Stripper	**X**	
Iron Removal Filter	**NA**	As of June 2021, there is no longer an iron removal filter tank.
Flow Meters	**X**	See Notes/Explanations section.
Gauges	**X**	
Stripper Blower	**X**	
Indication of Alarm	**X**	

Groundwater Treatment Wells

EW-1 Pump	**X**	
EW-1 Transducer	**X**	
EW-1 Flow Meter		EW-1 flow meter/totalizer screen no longer functioning.
EW-2 Pump	**X**	
EW-2 Transducer	**X**	
EW- 2 Flow Meter	**X**	
EW-3 Pump	**X**	
EW-3 Transducer	**X**	
EW-3 Flow Meter		EW-3 flow meter/totalizer screen no longer functioning.

Effluent Discharge

Outfall	**X**	Flowing
Cleanout	**X**	

Instrumentation/Readings:

EW-1

Pumping Rate	1.7 GPM (see Notes section)
Water Level Above Transducer	153 Inches
Flow Meter Reading	Not Working Gallons

EW-2

Pumping Rate	0.0 GPM (see Notes section)
Water Level Above Transducer	168 Inches
Flow Meter Reading	28,543,853 Gallons

EW-3

Pumping Rate	0.0 GPM (see Notes section)
Water Level Above Transducer	118 Inches
Flow Meter Reading	Not Working Gallons

Air Stripper

Stripper Blower Pressure (Panel)	Broken Inches H2O
Stripper Blower Pressure (Stripper)	Broken Inches H2O

Effluent Flow

Total System Meter Reading	77,560,690 Gallons

Influent/Effluent Sampling

AQUEOUS:
Monthly monitoring samples of aqueous phase system influent and effluent were collected and submitted for the following analyses:

- VOCs by EPA Method 624 (CFR136 624)
- Iron by MCAWW 200.7
- TSS by MCAWW SM18-20 2540 D
- pH by MCAWW SM18-20 4500-H+B

pH measurements must be made in the field:

Influent pH 7.0 (field test strip)
Effluent pH 7.0 (field test strip)

Notes/Explanations
(Please include any additional information on those items that require attention as indicated above.)

The system was on upon arrival.

Total system flow was timed at 1.7 gpm on system totalizer flow meter. Timed each EW gpm by shutting off flow from other 2 EWs.

The SVE building overhead door flashing has wind and header damage.

The most recent round of water levels (3Q2024) was collected July 29, 2024.

The air stripper trays were last mechanically cleaned September 13, 2024.

The monthly influent/effluent samples were collected today September 24, 2024.

Operation, Maintenance & Monitoring Checklist

Groundwater Treatment System
CHEM-TROL Site
Town of Hamburg, New York

This summary inspection checklist is to be completed during each site inspection. Note all items, which require repair or maintenance. Use the last page to note any additional comments or unusual events.

General

Service by: R. Murphy, C. Finn Weather/Temperature: Cloudy, rain, 62°F
Date: 10/29/2024 Arrival Time: 0730 Departure Time: 15:30

Reason for Service: Inspect system, clean system

Inspection Items:	OK:	Comments:
Site Appearance/Condition	X	See Notes/Explanations section.
Building Exterior		
Overhead Door	X	Wood lintel and metal trim repaired.
Siding	X	Metal trim repaired.
Roof and Discharge Pipe	X	
Building Interior		
Indication of Spills or Leaks	X	
Building Heater	X	Turned Off
Phone System	X	Disconnected
Exhaust Fan		Could not get fan to work.
Fire Extinguisher	X	
First Aid & Eye Wash	X	

Groundwater Treatment System

Air Stripper	**X**	
Iron Removal Filter	**NA**	As of June 2021, there is no longer an iron removal filter tank.
Flow Meters	**X**	See Notes/Explanations section.
Gauges	**X**	
Stripper Blower	**X**	
Indication of Alarm	**X**	

Groundwater Treatment Wells

EW-1 Pump	**X**	
EW-1 Transducer	**X**	
EW-1 Flow Meter		EW-1 flow meter/totalizer screen no longer functioning.
EW-2 Pump	**X**	
EW-2 Transducer	**X**	
EW- 2 Flow Meter	**X**	
EW-3 Pump	**X**	
EW-3 Transducer	**X**	
EW-3 Flow Meter		EW-3 flow meter/totalizer screen no longer functioning.

Effluent Discharge

Outfall	**X**	Flowing
Cleanout	**X**	

Instrumentation/Readings:

EW-1

Pumping Rate	1.8 GPM (see Notes section)
Water Level Above Transducer	157 Inches
Flow Meter Reading	Not Working Gallons

EW-2

Pumping Rate	0.3 GPM (see Notes section)
Water Level Above Transducer	177 Inches
Flow Meter Reading	28,543,853 Gallons

EW-3

Pumping Rate	0.0 GPM (see Notes section)
Water Level Above Transducer	99 Inches
Flow Meter Reading	Not Working Gallons

Air Stripper

Stripper Blower Pressure (Panel)	Broken Inches H2O
Stripper Blower Pressure (Stripper)	Broken Inches H2O

Effluent Flow

Total System Meter Reading	77,649,540 Gallons

Influent/Effluent Sampling

No Sampling was performed.

Notes/Explanations
(Please include any additional information on those items that require attention as indicated above.)

The system was on upon arrival. Shut down the system and turned the main breaker off for cleaning.

Upon the completion of the cleaning of the system and shed, the system was successfully turned back on. Total system flow was timed at 2.5 gpm on the system totalizer flow meter. Timed each EW gpm by shutting off flow from other 2 EWs. EW-3 was flowing, but at too low of rate by itself to register on the flow meter.

The most recent round of water levels (4Q2024) was collected September 25, 2024.

The air stripper trays were last mechanically cleaned today, October 29, 2024.

Operation, Maintenance & Monitoring Checklist

Groundwater Treatment System
CHEM-TROL Site
Town of Hamburg, New York

This summary inspection checklist is to be completed during each site inspection. Note all items, which require repair or maintenance. Use the last page to note any additional comments or unusual events.

General

Service by: C. Finn Weather/Temperature: Partly cloudy, mid-40s °F
Date: 11/12/2024 Arrival Time: 08:45 Departure Time: 10:15

Reason for Service: Inspect system, perform monthly sampling

Inspection Items:	OK:	Comments:
Site Appearance/Condition	X	See Notes/Explanations section.
Building Exterior		
Overhead Door	X	Wood lintel and metal trim repaired.
Siding	X	Metal trim repaired.
Roof and Discharge Pipe	X	
Building Interior		
Indication of Spills or Leaks	X	
Building Heater	X	Turned Off
Phone System	X	Disconnected
Exhaust Fan		Could not get fan to work.
Fire Extinguisher	X	
First Aid & Eye Wash	X	

Groundwater Treatment System

Air Stripper	**X**	
Iron Removal Filter	**NA**	As of June 2021, there is no longer an iron removal filter tank.
Flow Meters	**X**	See Notes/Explanations section.
Gauges	**X**	
Stripper Blower	**X**	
Indication of Alarm	**X**	

Groundwater Treatment Wells

EW-1 Pump	**X**	
EW-1 Transducer	**X**	
EW-1 Flow Meter		EW-1 flow meter/totalizer screen no longer functioning.
EW-2 Pump	**X**	
EW-2 Transducer	**X**	
EW- 2 Flow Meter	**X**	
EW-3 Pump	**X**	
EW-3 Transducer	**X**	
EW-3 Flow Meter		EW-3 flow meter/totalizer screen no longer functioning.

Effluent Discharge

Outfall	**X**	Flowing
Cleanout	**X**	

Instrumentation/Readings:

EW-1

Pumping Rate	1.8 GPM (see Notes section)
Water Level Above Transducer	186 Inches
Flow Meter Reading	Not Working Gallons

EW-2

Pumping Rate	0.3 GPM (see Notes section)
Water Level Above Transducer	182 Inches
Flow Meter Reading	28,543,853 Gallons

EW-3

Pumping Rate	0.5 GPM (see Notes section)
Water Level Above Transducer	113 Inches
Flow Meter Reading	Not Working Gallons

Air Stripper

Stripper Blower Pressure (Panel)	Broken Inches H2O
Stripper Blower Pressure (Stripper)	Broken Inches H2O

Effluent Flow

Total System Meter Reading	77,692,765 Gallons

Influent/Effluent Sampling

AQUEOUS:
Monthly monitoring samples of aqueous phase system influent and effluent were collected and submitted for the following analyses:

- VOCs by EPA Method 624 (CFR136 624)
- Iron by MCAWW 200.7
- TSS by MCAWW SM18-20 2540 D
- pH by MCAWW SM18-20 4500-H+B

pH measurements must be made in the field:

Influent pH 7.0 (field test strip)
Effluent pH 7.0 (field test strip)

Notes/Explanations
(Please include any additional information on those items that require attention as indicated above.)

The system was on upon arrival. Shut down the system and turned the main breaker off for cleaning.

Total system flow was timed at 2.5 gpm on the system totalizer flow meter. Timed each EW gpm by shutting off flow from other 2 EWs. EW-3 was flowing, but at too low of rate by itself to register on the flow meter.

The most recent round of water levels (3Q2024) was collected September 25, 2024.

The air stripper trays were last mechanically cleaned October 29, 2024.

Operation, Maintenance & Monitoring Checklist

Groundwater Treatment System
CHEM-TROL Site
Town of Hamburg, New York

This summary inspection checklist is to be completed during each site inspection. Note all items, which require repair or maintenance. Use the last page to note any additional comments or unusual events.

General

Service by: Tom Urban Weather/Temperature: Cloudy, calm, 20°F
Date: 01/08/2025 Arrival Time: 09:00 Departure Time: 10:30

Reason for Service: Inspect system, influent/effluent sampling

Inspection Items:	OK:	Comments:
Site Appearance/Condition	X	See Notes/Explanations section.
Building Exterior		
Overhead Door	X	
Siding	X	
Roof and Discharge Pipe	X	
Building Interior		
Indication of Spills or Leaks	X	
Building Heater	X	Turned On
Phone System	X	Disconnected
Exhaust Fan		Could not get fan to work.
Fire Extinguisher	X	
First Aid & Eye Wash	X	

Groundwater Treatment System

Air Stripper	**X**	
Iron Removal Filter	**NA**	As of June 2021, there is no longer an iron removal filter tank.
Flow Meters	**X**	See Notes/Explanations section.
Gauges	**X**	
Stripper Blower	**X**	
Indication of Alarm	**X**	

Groundwater Treatment Wells

EW-1 Pump	**X**	
EW-1 Transducer	**X**	
EW-1 Flow Meter		EW-1 flow meter/totalizer screen no longer functioning.
EW-2 Pump	**X**	
EW-2 Transducer	**X**	
EW- 2 Flow Meter	**X**	
EW-3 Pump	**X**	
EW-3 Transducer	**X**	
EW-3 Flow Meter		EW-3 flow meter/totalizer screen no longer functioning.

Effluent Discharge

Outfall	**X**	Flowing
Cleanout	**X**	

Instrumentation/Readings:

EW-1

Pumping Rate	2.2 GPM (see Notes section)
Water Level Above Transducer	220 Inches
Flow Meter Reading	Not Working Gallons

EW-2

Pumping Rate	0.8 GPM (see Notes section)
Water Level Above Transducer	203 Inches
Flow Meter Reading	28,543,853 Gallons

EW-3

Pumping Rate	0.0 GPM (see Notes section)
Water Level Above Transducer	163 Inches
Flow Meter Reading	Not Working Gallons

Air Stripper

Stripper Blower Pressure (Panel)	Broken Inches H2O
Stripper Blower Pressure (Stripper)	Broken Inches H2O

Effluent Flow

Total System Meter Reading	77,929,350 Gallons

Influent/Effluent Sampling

AQUEOUS:
Monthly monitoring samples of aqueous phase system influent and effluent were collected and submitted for the following analyses:

- VOCs by EPA Method 624.1 (CFR136 624)
- Iron by MCAWW 200.7
- TSS by MCAWW SM18-20 2540 D

pH measurements and temperature must be made in the field:

Influent pH 7.70 Temperature (°C) 7.1 (Oakton pHTestr 30 s/n T311487089)
Effluent pH 7.77 Temperature (°C) 7.6 (Oakton pHTestr 30 s/n T311487089)

Notes/Explanations
(Please include any additional information on those items that require attention as indicated above.)

The system was on upon arrival.

System alarm "E-STOP PRESSED" display on control panel was acknowledged and cleared (2/13/99 at 6:18:57 PM). Two other alarms were cleared: "WELL #1 HIGH LEVEL" (1/8/99 at 2:15:14 PM) and "AIR STRIPPER OFF" (1/7/99 at 7:23:25 PM).

Total system flow was timed at 3.0 gpm on the system totalizer flow meter. Timed each EW gpm by shutting off flow from other 2 EWs. EW-3 was not flowing.

The most recent round of water levels (3Q2024) was collected September 25, 2024.

The air stripper trays were last mechanically cleaned on October 29, 2024.

The bi-monthly influent/effluent samples were collected today, January 8, 2025.

Operation, Maintenance & Monitoring Checklist

Groundwater Treatment System
CHEM-TROL Site
Town of Hamburg, New York

This summary inspection checklist is to be completed during each site inspection. Note all items, which require repair or maintenance. Use the last page to note any additional comments or unusual events.

General

Service by: T. Urban, E. Smith, C. Horrocks Weather/Temperature: Partly cloudy, calm, 25°F
Date: 02/04/2025 Arrival Time: 08:00 Departure Time: 13:30

Reason for Service: Inspect system, clean system

Inspection Items:	OK:	Comments:
Site Appearance/Condition	X	See Notes/Explanations section.
Building Exterior		
Overhead Door	X	
Siding	X	
Roof and Discharge Pipe	X	
Building Interior		
Indication of Spills or Leaks	X	
Building Heater	X	Turned On
Phone System	X	Disconnected
Exhaust Fan		Could not get fan to work.
Fire Extinguisher	X	
First Aid & Eye Wash	X	

Groundwater Treatment System

Air Stripper	**X**	
Iron Removal Filter	**NA**	As of June 2021, there is no longer an iron removal filter tank.
Flow Meters	**X**	See Notes/Explanations section.
Gauges	**X**	
Stripper Blower	**X**	
Indication of Alarm	**X**	

Groundwater Treatment Wells

EW-1 Pump	**X**	
EW-1 Transducer	**X**	
EW-1 Flow Meter		EW-1 flow meter/totalizer screen no longer functioning.
EW-2 Pump	**X**	
EW-2 Transducer	**X**	
EW- 2 Flow Meter	**X**	EW-2 flow meter/totalizer screen no longer functioning. Frozen on 28,543,853 gallons.
EW-3 Pump	**X**	
EW-3 Transducer	**X**	
EW-3 Flow Meter		EW-3 flow meter/totalizer screen no longer functioning.

Effluent Discharge

Outfall	**X**	Flowing
Cleanout	**X**	

Instrumentation/Readings:

EW-1

Pumping Rate	1.8 GPM (see Notes section)
Water Level Above Transducer	250 Inches
Flow Meter Reading	Not Working Gallons

EW-2

Pumping Rate	0.0 GPM (see Notes section)
Water Level Above Transducer	"***" Inches
Flow Meter Reading	28,543,853 Gallons (frozen)

EW-3

Pumping Rate	0.0 GPM (see Notes section)
Water Level Above Transducer	160 Inches
Flow Meter Reading	Not Working Gallons

Air Stripper

Stripper Blower Pressure (Panel)	Broken Inches H2O
Stripper Blower Pressure (Stripper)	Broken Inches H2O

Effluent Flow

Total System Meter Reading	78,012,748 Gallons

Influent/Effluent Sampling

No Sampling was performed.

Notes/Explanations
(Please include any additional information on those items that require attention as indicated above.)

The system was on upon arrival.

Three system alarms: "WELL #1 HIGH LEVEL" (4/15/99 at 9:05:32 PM), "WELL #2 LOW LEVEL" (4/8/99 at 1:24:40 PM), and "WELL #2 HIGH LEVEL" (4/8/99 at 12:14:02 AM) on the control panel display were acknowledged and cleared.

Shut down the system and turned the main breaker off for cleaning.

Upon completion of cleaning the system, the system was turned back on. Total system flow was timed at 2.2 gpm on the system totalizer flow meter after cleaning.

The most recent round of water levels was collected September 25, 2024.

The bi-monthly influent/effluent samples were collected on January 8, 2025.

The air stripper trays were last mechanically cleaned today February 4, 2025.

Operation, Maintenance & Monitoring Checklist

Groundwater Treatment System
CHEM-TROL Site
Town of Hamburg, New York

This summary inspection checklist is to be completed during each site inspection. Note all items, which require repair or maintenance. Use the last page to note any additional comments or unusual events.

General

Service by: T. Urban, E. Murphy, P. Bliek (Matrix) Weather/Temperature: cloudy, calm, 25°F
Date: 02/12/2025 Arrival Time: 07:45 Departure Time: 09:45

Reason for Service: Inspect system, Troubleshoot system

Inspection Items:	OK:	Comments:
Site Appearance/Condition	X	See Notes/Explanations section.
Building Exterior		
Overhead Door	X	
Siding	X	
Roof and Discharge Pipe	X	
Building Interior		
Indication of Spills or Leaks	X	
Building Heater	X	Turned On
Phone System	X	Disconnected
Exhaust Fan		Could not get fan to work.
Fire Extinguisher	X	
First Aid & Eye Wash	X	

Groundwater Treatment System

Air Stripper	**X**	
Iron Removal Filter	**NA**	As of June 2021, there is no longer an iron removal filter tank.
Flow Meters	**X**	See Notes/Explanations section.
Gauges	**X**	
Stripper Blower	**X**	
Indication of Alarm	**X**	

Groundwater Treatment Wells

EW-1 Pump	**X**	
EW-1 Transducer	**X**	
EW-1 Flow Meter		EW-1 flow meter/totalizer screen no longer functioning.
EW-2 Pump	**X**	
EW-2 Transducer	**X**	
EW- 2 Flow Meter	**X**	EW-2 flow meter/totalizer screen no longer functioning. Frozen on 28,543,853 gallons.
EW-3 Pump	**X**	
EW-3 Transducer	**X**	
EW-3 Flow Meter		EW-3 flow meter/totalizer screen no longer functioning.

Effluent Discharge

Outfall	**X**	Flowing
Cleanout	**X**	

Instrumentation/Readings:

EW-1

Pumping Rate	1.5 GPM (see Notes section)
Water Level Above Transducer	249 Inches
Flow Meter Reading	Not Working Gallons

EW-2

Pumping Rate	0.0 GPM (see Notes section)
Water Level Above Transducer	"***" Inches
Flow Meter Reading	28,543,853 Gallons (frozen)

EW-3

Pumping Rate	0.0 GPM (see Notes section)
Water Level Above Transducer	156 Inches
Flow Meter Reading	Not Working Gallons

Air Stripper

Stripper Blower Pressure (Panel)	Broken Inches H2O
Stripper Blower Pressure (Stripper)	Broken Inches H2O

Effluent Flow

Total System Meter Reading	78,031,665 Gallons

Influent/Effluent Sampling

No Sampling was performed.

Notes/Explanations
(Please include any additional information on those items that require attention as indicated above.)

The system was on upon arrival.

System alarm: “WELL #1 HIGH LEVEL” (4/20/99 at 4:08:48 AM) on the control panel display.

Total system flow was timed at 1.5 gpm on the system totalizer flow meter.

Matrix adjusts the settings for the Sensaphone via smartphone app. Matrix troubleshoots EW-2 and believes the transducer is faulty and removes the transducer. EW-2 is left “OFF”. Matrix looks at EW-1 and EW-3 well head control panels and finds nothing faulty.

The most recent round of water levels was collected September 25, 2024.

The bi-monthly influent/effluent samples were collected on January 8, 2025.

The air stripper trays were last mechanically cleaned on February 4, 2025.

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ANALYTICAL REPORT

PREPARED FOR

Attn: Ryan Donovan
Waste Management
600 New Ludlow Road
South Hadley, Massachusetts 01075

Generated 10/1/2024 2:36:08 PM

JOB DESCRIPTION

ChemTrol Site - Monthly
ChemTrol Monthly Groundwater

JOB NUMBER

480-223658-1

Eurofins Buffalo
10 Hazelwood Drive
Amherst NY 14228-2298

See page two for job notes and contact information.

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Northeast, LLC Project Manager.

Authorization

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Table of Contents

Definitions/Glossary

Client: Waste Management
Project/Site: ChemTrol Site - Monthly

Job ID: 480-223658-1

Qualifiers

General Chemistry

Qualifier	Qualifier Description
HF	Parameter with a holding time of 15 minutes. Test performed by laboratory at client's request. Sample was analyzed outside of hold time.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 480-223658-1 — Eurofins Buffalo

Job Narrative
480-223658-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 9/24/2024 12:54 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 5.1°C.

GC/MS VOA
Method 624.1_PREC: The following sample was diluted to bring the concentration of target analytes within the calibration range: Influent (480-223658-2). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Metals
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry
Method SM4500_H+: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following samples has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: Effluent (480-223658-1) and Influent (480-223658-2).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Detection Summary

Client: Waste Management
Project/Site: ChemTrol Site - Monthly

Job ID: 480-223658-1

Client Sample ID: Effluent — Lab Sample ID: 480-223658-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	218		50.0		ug/L	1		200.7 Rev 4.4	Total Recoverable
pH	7.7	HF	0.1		SU	1		SM 4500 H+ B	Total/NA
Temperature	16.1	HF	0.001		Degrees C	1		SM 4500 H+ B	Total/NA

Client Sample ID: Influent — Lab Sample ID: 480-223658-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	23		12		ug/L	20		624.1	Total/NA
Chloroethane	26		17		ug/L	20		624.1	Total/NA
o-Chlorotoluene	640		6.6		ug/L	20		624.1	Total/NA
Iron	1270		50.0		ug/L	1		200.7 Rev 4.4	Total Recoverable
pH	6.7	HF	0.1		SU	1		SM 4500 H+ B	Total/NA
Temperature	16.0	HF	0.001		Degrees C	1		SM 4500 H+ B	Total/NA

Client Sample ID: Trip Blank — Lab Sample ID: 480-223658-3

No Detections.

This Detection Summary does not include radiochemical test results.

Client: Waste Management
Project/Site: ChemTrol Site - Monthly

Job ID: 480-223658-1

Client Sample ID: Effluent

Date Collected: 09/24/24 08:30
Date Received: 09/24/24 12:54

Lab Sample ID: 480-223658-1

Matrix: Water

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0		ug/L			09/24/24 22:26	1
1,1-Dichloroethane	ND		5.0		ug/L			09/24/24 22:26	1
1,1-Dichloroethene	ND		5.0		ug/L			09/24/24 22:26	1
Benzene	ND		5.0		ug/L			09/24/24 22:26	1
Chlorobenzene	ND		5.0		ug/L			09/24/24 22:26	1
Chloroethane	ND		5.0		ug/L			09/24/24 22:26	1
cis-1,2-Dichloroethene	ND		5.0		ug/L			09/24/24 22:26	1
Toluene	ND		5.0		ug/L			09/24/24 22:26	1
Trichloroethene	ND		5.0		ug/L			09/24/24 22:26	1
o-Chlorotoluene	ND		5.0		ug/L			09/24/24 22:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*111*		*68 - 130*		*09/24/24 22:26*	*1*
Dibromofluoromethane (Surr)	*110*		*75 - 123*		*09/24/24 22:26*	*1*
4-Bromofluorobenzene (Surr)	*97*		*76 - 123*		*09/24/24 22:26*	*1*
Toluene-d8 (Surr)	*107*		*77 - 120*		*09/24/24 22:26*	*1*

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**218**		50.0		ug/L		09/25/24 08:15	09/26/24 12:34	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (SM 2540D)	ND		4.0		mg/L			09/26/24 10:19	1
pH (SM 4500 H+ B)	**7.7**	**HF**	0.1		SU			09/26/24 13:37	1
Temperature (SM 4500 H+ B)	**16.1**	**HF**	0.001		Degrees C			09/26/24 13:37	1

Client: Waste Management
Project/Site: ChemTrol Site - Monthly

Job ID: 480-223658-1

Client Sample ID: Influent

Date Collected: 09/24/24 08:45
Date Received: 09/24/24 12:54

Lab Sample ID: 480-223658-2

Matrix: Water

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		7.7		ug/L			09/26/24 21:10	20
1,1-Dichloroethane	**23**		12		ug/L			09/26/24 21:10	20
1,1-Dichloroethene	ND		17		ug/L			09/26/24 21:10	20
Benzene	ND		12		ug/L			09/26/24 21:10	20
Chlorobenzene	ND		9.5		ug/L			09/26/24 21:10	20
Chloroethane	**26**		17		ug/L			09/26/24 21:10	20
cis-1,2-Dichloroethene	ND		11		ug/L			09/26/24 21:10	20
Toluene	ND		9.1		ug/L			09/26/24 21:10	20
Trichloroethene	ND		12		ug/L			09/26/24 21:10	20
o-Chlorotoluene	**640**		6.6		ug/L			09/26/24 21:10	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*68 - 130*		*09/26/24 21:10*	*20*
Dibromofluoromethane (Surr)	*102*		*75 - 123*		*09/26/24 21:10*	*20*
4-Bromofluorobenzene (Surr)	*97*		*76 - 123*		*09/26/24 21:10*	*20*
Toluene-d8 (Surr)	*104*		*77 - 120*		*09/26/24 21:10*	*20*

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**1270**		50.0		ug/L		09/25/24 08:15	09/26/24 12:41	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (SM 2540D)	ND		4.0		mg/L			09/26/24 10:19	1
pH (SM 4500 H+ B)	**6.7**	**HF**	0.1		SU			09/26/24 13:40	1
Temperature (SM 4500 H+ B)	**16.0**	**HF**	0.001		Degrees C			09/26/24 13:40	1

Client Sample Results

Client: Waste Management
Project/Site: ChemTrol Site - Monthly

Job ID: 480-223658-1

Client Sample ID: Trip Blank

Date Collected: 09/24/24 00:00
Date Received: 09/24/24 12:54

Lab Sample ID: 480-223658-3

Matrix: Water

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0		ug/L			09/24/24 23:15	1
1,1-Dichloroethane	ND		5.0		ug/L			09/24/24 23:15	1
1,1-Dichloroethene	ND		5.0		ug/L			09/24/24 23:15	1
Benzene	ND		5.0		ug/L			09/24/24 23:15	1
Chlorobenzene	ND		5.0		ug/L			09/24/24 23:15	1
Chloroethane	ND		5.0		ug/L			09/24/24 23:15	1
cis-1,2-Dichloroethene	ND		5.0		ug/L			09/24/24 23:15	1
Toluene	ND		5.0		ug/L			09/24/24 23:15	1
Trichloroethene	ND		5.0		ug/L			09/24/24 23:15	1
o-Chlorotoluene	ND		5.0		ug/L			09/24/24 23:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*109*		*68 - 130*		*09/24/24 23:15*	*1*
Dibromofluoromethane (Surr)	*107*		*75 - 123*		*09/24/24 23:15*	*1*
4-Bromofluorobenzene (Surr)	*98*		*76 - 123*		*09/24/24 23:15*	*1*
Toluene-d8 (Surr)	*106*		*77 - 120*		*09/24/24 23:15*	*1*

Method: 624.1 - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-726076/8
Matrix: Water
Analysis Batch: 726076

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0		ug/L			09/24/24 20:26	1
1,1-Dichloroethane	ND		5.0		ug/L			09/24/24 20:26	1
1,1-Dichloroethene	ND		5.0		ug/L			09/24/24 20:26	1
Benzene	ND		5.0		ug/L			09/24/24 20:26	1
Chlorobenzene	ND		5.0		ug/L			09/24/24 20:26	1
Chloroethane	ND		5.0		ug/L			09/24/24 20:26	1
cis-1,2-Dichloroethene	ND		5.0		ug/L			09/24/24 20:26	1
Toluene	ND		5.0		ug/L			09/24/24 20:26	1
Trichloroethene	ND		5.0		ug/L			09/24/24 20:26	1
o-Chlorotoluene	ND		5.0		ug/L			09/24/24 20:26	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*68 - 130*		*09/24/24 20:26*	*1*
Dibromofluoromethane (Surr)	*110*		*75 - 123*		*09/24/24 20:26*	*1*
4-Bromofluorobenzene (Surr)	*99*		*76 - 123*		*09/24/24 20:26*	*1*
Toluene-d8 (Surr)	*106*		*77 - 120*		*09/24/24 20:26*	*1*

Lab Sample ID: LCS 480-726076/6
Matrix: Water
Analysis Batch: 726076

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1-Trichloroethane	20.0	23.1		ug/L		116	52 - 162
1,1-Dichloroethane	20.0	21.4		ug/L		107	59 - 155
1,1-Dichloroethene	20.0	22.8		ug/L		114	1 - 234
Benzene	20.0	20.5		ug/L		102	37 - 151
Chlorobenzene	20.0	20.6		ug/L		103	37 - 160
Chloroethane	20.0	20.7		ug/L		103	14 - 230
Toluene	20.0	21.4		ug/L		107	47 - 150
Trichloroethene	20.0	21.1		ug/L		106	71 - 157

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*104*		*68 - 130*
Dibromofluoromethane (Surr)	*105*		*75 - 123*
4-Bromofluorobenzene (Surr)	*99*		*76 - 123*
Toluene-d8 (Surr)	*106*		*77 - 120*

Lab Sample ID: MB 480-726353/8
Matrix: Water
Analysis Batch: 726353

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0		ug/L			09/26/24 20:22	1
1,1-Dichloroethane	ND		5.0		ug/L			09/26/24 20:22	1
1,1-Dichloroethene	ND		5.0		ug/L			09/26/24 20:22	1
Benzene	ND		5.0		ug/L			09/26/24 20:22	1
Chlorobenzene	ND		5.0		ug/L			09/26/24 20:22	1
Chloroethane	ND		5.0		ug/L			09/26/24 20:22	1

Method: 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-726353/8
Matrix: Water
Analysis Batch: 726353

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	ND		5.0		ug/L			09/26/24 20:22	1
Toluene	ND		5.0		ug/L			09/26/24 20:22	1
Trichloroethene	ND		5.0		ug/L			09/26/24 20:22	1
o-Chlorotoluene	ND		5.0		ug/L			09/26/24 20:22	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*68 - 130*		*09/26/24 20:22*	*1*
Dibromofluoromethane (Surr)	*103*		*75 - 123*		*09/26/24 20:22*	*1*
4-Bromofluorobenzene (Surr)	*97*		*76 - 123*		*09/26/24 20:22*	*1*
Toluene-d8 (Surr)	*104*		*77 - 120*		*09/26/24 20:22*	*1*

Lab Sample ID: LCS 480-726353/26
Matrix: Water
Analysis Batch: 726353

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1-Trichloroethane	20.0	20.7		ug/L		103	52 - 162
1,1-Dichloroethane	20.0	19.7		ug/L		99	59 - 155
1,1-Dichloroethene	20.0	20.6		ug/L		103	1 - 234
Benzene	20.0	19.3		ug/L		96	37 - 151
Chlorobenzene	20.0	19.3		ug/L		97	37 - 160
Chloroethane	20.0	21.3		ug/L		107	14 - 230
Toluene	20.0	20.1		ug/L		100	47 - 150
Trichloroethene	20.0	19.6		ug/L		98	71 - 157

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*106*		*68 - 130*
Dibromofluoromethane (Surr)	*103*		*75 - 123*
4-Bromofluorobenzene (Surr)	*99*		*76 - 123*
Toluene-d8 (Surr)	*105*		*77 - 120*

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 480-726052/1-A
Matrix: Water
Analysis Batch: 726313

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 726052

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		50.0		ug/L		09/25/24 08:15	09/26/24 11:56	1

Lab Sample ID: LCS 480-726052/2-A
Matrix: Water
Analysis Batch: 726313

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 726052

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Iron	5100	5683		ug/L		111	85 - 115

QC Sample Results

Client: Waste Management
Project/Site: ChemTrol Site - Monthly

Job ID: 480-223658-1

Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: MB 480-726278/1
Matrix: Water
Analysis Batch: 726278

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0		mg/L			09/26/24 10:19	1

Lab Sample ID: LCS 480-726278/2
Matrix: Water
Analysis Batch: 726278

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Suspended Solids			247	244.8		mg/L		99	88 - 110		

Method: SM 4500 H+ B - pH

Lab Sample ID: LCS 480-726318/1
Matrix: Water
Analysis Batch: 726318

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
pH			7.00	7.0		SU		100	99 - 101		

QC Association Summary

Client: Waste Management
Project/Site: ChemTrol Site - Monthly

Job ID: 480-223658-1

GC/MS VOA

Analysis Batch: 726076

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-223658-1	Effluent	Total/NA	Water	624.1	
480-223658-3	Trip Blank	Total/NA	Water	624.1	
MB 480-726076/8	Method Blank	Total/NA	Water	624.1	
LCS 480-726076/6	Lab Control Sample	Total/NA	Water	624.1	

Analysis Batch: 726353

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-223658-2	Influent	Total/NA	Water	624.1	
MB 480-726353/8	Method Blank	Total/NA	Water	624.1	
LCS 480-726353/26	Lab Control Sample	Total/NA	Water	624.1	

Metals

Prep Batch: 726052

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-223658-1	Effluent	Total Recoverable	Water	200.7	
480-223658-2	Influent	Total Recoverable	Water	200.7	
MB 480-726052/1-A	Method Blank	Total Recoverable	Water	200.7	
LCS 480-726052/2-A	Lab Control Sample	Total Recoverable	Water	200.7	

Analysis Batch: 726313

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-223658-1	Effluent	Total Recoverable	Water	200.7 Rev 4.4	726052
480-223658-2	Influent	Total Recoverable	Water	200.7 Rev 4.4	726052
MB 480-726052/1-A	Method Blank	Total Recoverable	Water	200.7 Rev 4.4	726052
LCS 480-726052/2-A	Lab Control Sample	Total Recoverable	Water	200.7 Rev 4.4	726052

General Chemistry

Analysis Batch: 726278

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-223658-1	Effluent	Total/NA	Water	SM 2540D	
480-223658-2	Influent	Total/NA	Water	SM 2540D	
MB 480-726278/1	Method Blank	Total/NA	Water	SM 2540D	
LCS 480-726278/2	Lab Control Sample	Total/NA	Water	SM 2540D	

Analysis Batch: 726318

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-223658-1	Effluent	Total/NA	Water	SM 4500 H+ B	
480-223658-2	Influent	Total/NA	Water	SM 4500 H+ B	
LCS 480-726318/1	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	

Lab Chronicle

Client: Waste Management
Project/Site: ChemTrol Site - Monthly

Job ID: 480-223658-1

Client Sample ID: Effluent
Date Collected: 09/24/24 08:30
Date Received: 09/24/24 12:54

Lab Sample ID: 480-223658-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	624.1		1	726076	AXK	EET BUF	09/24/24 22:26
Total Recoverable	Prep	200.7			726052	EMO	EET BUF	09/25/24 08:15
Total Recoverable	Analysis	200.7 Rev 4.4		1	726313	BMB	EET BUF	09/26/24 12:34
Total/NA	Analysis	SM 2540D		1	726278	AB	EET BUF	09/26/24 10:19
Total/NA	Analysis	SM 4500 H+ B		1	726318	KB	EET BUF	09/26/24 13:37

Client Sample ID: Influent
Date Collected: 09/24/24 08:45
Date Received: 09/24/24 12:54

Lab Sample ID: 480-223658-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	624.1		20	726353	AXK	EET BUF	09/26/24 21:10
Total Recoverable	Prep	200.7			726052	EMO	EET BUF	09/25/24 08:15
Total Recoverable	Analysis	200.7 Rev 4.4		1	726313	BMB	EET BUF	09/26/24 12:41
Total/NA	Analysis	SM 2540D		1	726278	AB	EET BUF	09/26/24 10:19
Total/NA	Analysis	SM 4500 H+ B		1	726318	KB	EET BUF	09/26/24 13:40

Client Sample ID: Trip Blank
Date Collected: 09/24/24 00:00
Date Received: 09/24/24 12:54

Lab Sample ID: 480-223658-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	624.1		1	726076	AXK	EET BUF	09/24/24 23:15

Laboratory References:
EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Accreditation/Certification Summary

Client: Waste Management
Project/Site: ChemTrol Site - Monthly

Job ID: 480-223658-1

Laboratory: Eurofins Buffalo

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
New York	NELAP	10026	03-31-25

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
624.1		Water	o-Chlorotoluene
SM 4500 H+ B		Water	pH
SM 4500 H+ B		Water	Temperature

Method Summary

Client: Waste Management
Project/Site: ChemTrol Site - Monthly

Job ID: 480-223658-1

Method	Method Description	Protocol	Laboratory
624.1	Volatile Organic Compounds (GC/MS)	EPA	EET BUF
200.7 Rev 4.4	Metals (ICP)	EPA	EET BUF
SM 2540D	Solids, Total Suspended (TSS)	SM	EET BUF
SM 4500 H+ B	pH	SM	EET BUF
200.7	Preparation, Total Recoverable Metals	EPA	EET BUF

Protocol References:

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater"

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Sample Summary

Client: Waste Management
Project/Site: ChemTrol Site - Monthly

Job ID: 480-223658-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-223658-1	Effluent	Water	09/24/24 08:30	09/24/24 12:54
480-223658-2	Influent	Water	09/24/24 08:45	09/24/24 12:54
480-223658-3	Trip Blank	Water	09/24/24 00:00	09/24/24 12:54

Eurofins Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone: 716-691-2600 Fax: 716-691-7991

Chain of Custody Record

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Client Information	Sampler: Tom Urban	Lab PM: VanDette, Ryan T	Carrier Tracking No(s):	COC No: 480-192452-28522.1
Client Contact: Chad Moose	Phone: 716-856-5535	E-Mail: Ryan.VanDette@et.eurofinsus.com	State of Origin: NY	Page: Page 1 of 1
Company: Waste Management	PWSID:			Job #:
Address: Tullytown Landfill 444 Oxford Valley Road	Due Date Requested:			
City: Morrisville	TAT Requested (days):			
State, Zip: PA, 19067	Compliance Project: Δ Yes Δ No			
Phone: 215-269-2114(Tel) 215-699-8315(Fax)	PO #: 13453950			
Email: cmoose@wm.com	WO #:			
Project Name: ChemTrol Site/NY22 Event Desc: ChemTrol Monthly Groundwate	Project #: 48002447			
Site: New York	SSOW#:			

Analysis Requested

Preservation Codes:
D - HNO3
A - HCL
N - None
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	200.7 - Iron	624.1_PREC - 624	2540D - Total Suspended Solids	SM4500_H+ - pH	Total Number of containers	Special Instructions/Note:
			Preservation Code:				D	A	N	N		
Effluent	9/24/24	0830	G	Water	N	N	1	3	1	1	6	
Influent	9/24/24	0845	G	Water	N	N	1	3	1	1	6	
Trip Blank	9/24/24	—	G	Water	N	N		1			1	

480-223658 Chain of Custody

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment: drop off

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Tom Urban	9/24/24 1254	AECOM	Lyn	9-24-24 1254	TAB
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 5.1 ICE IR #5C

Ver: 05/06/2024

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ANALYTICAL REPORT

PREPARED FOR

Attn: Ryan Donovan
Waste Management
600 New Ludlow Road
South Hadley, Massachusetts 01075

Generated 11/18/2024 3:36:31 PM

JOB DESCRIPTION

ChemTrol Site - Monthly Groundwater
ChemTrol Monthly Groundwater

JOB NUMBER

480-225375-1

Eurofins Buffalo
10 Hazelwood Drive
Amherst NY 14228-2298

See page two for job notes and contact information.

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Northeast, LLC Project Manager.

Authorization

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Authorized for release by
Joshua Velez, Project Management Assistant I
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Designee for
Ryan VanDette, Project Manager II
Ryan.VanDette@et.eurofinsus.com
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Table of Contents

Definitions/Glossary

Client: Waste Management
Job ID: 480-225375-1
Project/Site: ChemTrol Site - Monthly Groundwater

Qualifiers

General Chemistry

Qualifier	Qualifier Description
HF	Parameter with a holding time of 15 minutes. Test performed by laboratory at client's request. Sample was analyzed outside of hold time.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 480-225375-1 Eurofins Buffalo

Job Narrative
480-225375-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 11/12/2024 10:45 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 2.9°C.

Receipt Exceptions
The following sample(s) was listed on the Chain of Custody (COC); however, no sample(s) was received: Lab did not receive trip blank.

GC/MS VOA
Method 624.1_PREC: The following sample was diluted to bring the concentration of target analytes within the calibration range: Influent (480-225375-2). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Metals
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry
Method SM4500_H+: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following samples has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: Effluent (480-225375-1) and Influent (480-225375-2).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Detection Summary

Client: Waste Management
Project/Site: ChemTrol Site - Monthly Groundwater

Job ID: 480-225375-1

Client Sample ID: Effluent — Lab Sample ID: 480-225375-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	1050		50.0		ug/L	1		200.7 Rev 4.4	Total Recoverable
Total Suspended Solids	18.8		4.0		mg/L	1		SM 2540D	Total/NA
pH	7.8	HF	0.1		SU	1		SM 4500 H+ B	Total/NA
Temperature	18.2	HF	0.001		Degrees C	1		SM 4500 H+ B	Total/NA

Client Sample ID: Influent — Lab Sample ID: 480-225375-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	19		12		ug/L	20		624.1	Total/NA
o-Chlorotoluene	1100		6.6		ug/L	20		624.1	Total/NA
Iron	1150		50.0		ug/L	1		200.7 Rev 4.4	Total Recoverable
pH	7.0	HF	0.1		SU	1		SM 4500 H+ B	Total/NA
Temperature	19.1	HF	0.001		Degrees C	1		SM 4500 H+ B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: Waste Management
Project/Site: ChemTrol Site - Monthly Groundwater

Job ID: 480-225375-1

Client Sample ID: Effluent

Date Collected: 11/12/24 09:30
Date Received: 11/12/24 10:45

Lab Sample ID: 480-225375-1

Matrix: Water

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0		ug/L			11/13/24 16:29	1
1,1-Dichloroethane	ND		5.0		ug/L			11/13/24 16:29	1
1,1-Dichloroethene	ND		5.0		ug/L			11/13/24 16:29	1
Benzene	ND		5.0		ug/L			11/13/24 16:29	1
Chlorobenzene	ND		5.0		ug/L			11/13/24 16:29	1
Chloroethane	ND		5.0		ug/L			11/13/24 16:29	1
cis-1,2-Dichloroethene	ND		5.0		ug/L			11/13/24 16:29	1
Toluene	ND		5.0		ug/L			11/13/24 16:29	1
Trichloroethene	ND		5.0		ug/L			11/13/24 16:29	1
o-Chlorotoluene	ND		5.0		ug/L			11/13/24 16:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*68 - 130*		*11/13/24 16:29*	*1*
Dibromofluoromethane (Surr)	*105*		*75 - 123*		*11/13/24 16:29*	*1*
4-Bromofluorobenzene (Surr)	*98*		*76 - 123*		*11/13/24 16:29*	*1*
Toluene-d8 (Surr)	*99*		*77 - 120*		*11/13/24 16:29*	*1*

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**1050**		50.0		ug/L		11/14/24 09:04	11/14/24 16:24	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (SM 2540D)	**18.8**		4.0		mg/L			11/14/24 16:22	1
pH (SM 4500 H+ B)	**7.8**	**HF**	0.1		SU			11/18/24 11:02	1
Temperature (SM 4500 H+ B)	**18.2**	**HF**	0.001		Degrees C			11/18/24 11:02	1

Client Sample ID: Influent
Lab Sample ID: 480-225375-2

Date Collected: 11/12/24 09:45
Matrix: Water
Date Received: 11/12/24 10:45

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		7.7		ug/L			11/13/24 16:54	20
1,1-Dichloroethane	**19**		12		ug/L			11/13/24 16:54	20
1,1-Dichloroethene	ND		17		ug/L			11/13/24 16:54	20
Benzene	ND		12		ug/L			11/13/24 16:54	20
Chlorobenzene	ND		9.5		ug/L			11/13/24 16:54	20
Chloroethane	ND		17		ug/L			11/13/24 16:54	20
cis-1,2-Dichloroethene	ND		11		ug/L			11/13/24 16:54	20
Toluene	ND		9.1		ug/L			11/13/24 16:54	20
Trichloroethene	ND		12		ug/L			11/13/24 16:54	20
o-Chlorotoluene	**1100**		6.6		ug/L			11/13/24 16:54	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*68 - 130*		*11/13/24 16:54*	*20*
Dibromofluoromethane (Surr)	*103*		*75 - 123*		*11/13/24 16:54*	*20*
4-Bromofluorobenzene (Surr)	*99*		*76 - 123*		*11/13/24 16:54*	*20*
Toluene-d8 (Surr)	*98*		*77 - 120*		*11/13/24 16:54*	*20*

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**1150**		50.0		ug/L		11/14/24 09:04	11/14/24 16:33	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (SM 2540D)	ND		4.0		mg/L			11/14/24 16:22	1
pH (SM 4500 H+ B)	**7.0**	**HF**	0.1		SU			11/18/24 11:08	1
Temperature (SM 4500 H+ B)	**19.1**	**HF**	0.001		Degrees C			11/18/24 11:08	1

Method: 624.1 - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-732253/8
Matrix: Water
Analysis Batch: 732253

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0		ug/L			11/13/24 12:53	1
1,1-Dichloroethane	ND		5.0		ug/L			11/13/24 12:53	1
1,1-Dichloroethene	ND		5.0		ug/L			11/13/24 12:53	1
Benzene	ND		5.0		ug/L			11/13/24 12:53	1
Chlorobenzene	ND		5.0		ug/L			11/13/24 12:53	1
Chloroethane	ND		5.0		ug/L			11/13/24 12:53	1
cis-1,2-Dichloroethene	ND		5.0		ug/L			11/13/24 12:53	1
Toluene	ND		5.0		ug/L			11/13/24 12:53	1
Trichloroethene	ND		5.0		ug/L			11/13/24 12:53	1
o-Chlorotoluene	ND		5.0		ug/L			11/13/24 12:53	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*68 - 130*		*11/13/24 12:53*	*1*
Dibromofluoromethane (Surr)	*104*		*75 - 123*		*11/13/24 12:53*	*1*
4-Bromofluorobenzene (Surr)	*99*		*76 - 123*		*11/13/24 12:53*	*1*
Toluene-d8 (Surr)	*99*		*77 - 120*		*11/13/24 12:53*	*1*

Lab Sample ID: LCS 480-732253/6
Matrix: Water
Analysis Batch: 732253

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1-Trichloroethane	20.0	22.1		ug/L		111	52 - 162
1,1-Dichloroethane	20.0	17.8		ug/L		89	59 - 155
1,1-Dichloroethene	20.0	18.6		ug/L		93	1 - 234
Benzene	20.0	19.1		ug/L		95	37 - 151
Chlorobenzene	20.0	20.1		ug/L		100	37 - 160
Chloroethane	20.0	16.1		ug/L		81	14 - 230
Toluene	20.0	19.5		ug/L		98	47 - 150
Trichloroethene	20.0	19.8		ug/L		99	71 - 157

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*99*		*68 - 130*
Dibromofluoromethane (Surr)	*103*		*75 - 123*
4-Bromofluorobenzene (Surr)	*100*		*76 - 123*
Toluene-d8 (Surr)	*99*		*77 - 120*

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 480-732306/1-A
Matrix: Water
Analysis Batch: 732509

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 732306

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		50.0		ug/L		11/14/24 09:04	11/14/24 16:18	1

Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

Lab Sample ID: LCS 480-732306/2-A
Matrix: Water
Analysis Batch: 732509

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 732306

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Iron			5100	5199		ug/L		102	85 - 115		

Lab Sample ID: 480-225375-1 MS
Matrix: Water
Analysis Batch: 732509

Client Sample ID: Effluent
Prep Type: Total Recoverable
Prep Batch: 732306

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Iron	1050		5100	6139		ug/L		100	70 - 130		

Lab Sample ID: 480-225375-1 MSD
Matrix: Water
Analysis Batch: 732509

Client Sample ID: Effluent
Prep Type: Total Recoverable
Prep Batch: 732306

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Iron	1050		5100	6093		ug/L		99	70 - 130	1	20

Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: MB 480-732478/1
Matrix: Water
Analysis Batch: 732478

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0		mg/L			11/14/24 16:22	1

Lab Sample ID: LCS 480-732478/2
Matrix: Water
Analysis Batch: 732478

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Suspended Solids			246	240.8		mg/L		98	88 - 110		

Method: SM 4500 H+ B - pH

Lab Sample ID: LCS 480-732782/23
Matrix: Water
Analysis Batch: 732782

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
pH			7.00	7.0		SU		100	99 - 101		

QC Association Summary

Client: Waste Management
Job ID: 480-225375-1
Project/Site: ChemTrol Site - Monthly Groundwater

GC/MS VOA

Analysis Batch: 732253

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-225375-1	Effluent	Total/NA	Water	624.1	
480-225375-2	Influent	Total/NA	Water	624.1	
MB 480-732253/8	Method Blank	Total/NA	Water	624.1	
LCS 480-732253/6	Lab Control Sample	Total/NA	Water	624.1	

Metals

Prep Batch: 732306

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-225375-1	Effluent	Total Recoverable	Water	200.7	
480-225375-2	Influent	Total Recoverable	Water	200.7	
MB 480-732306/1-A	Method Blank	Total Recoverable	Water	200.7	
LCS 480-732306/2-A	Lab Control Sample	Total Recoverable	Water	200.7	
480-225375-1 MS	Effluent	Total Recoverable	Water	200.7	
480-225375-1 MSD	Effluent	Total Recoverable	Water	200.7	

Analysis Batch: 732509

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-225375-1	Effluent	Total Recoverable	Water	200.7 Rev 4.4	732306
480-225375-2	Influent	Total Recoverable	Water	200.7 Rev 4.4	732306
MB 480-732306/1-A	Method Blank	Total Recoverable	Water	200.7 Rev 4.4	732306
LCS 480-732306/2-A	Lab Control Sample	Total Recoverable	Water	200.7 Rev 4.4	732306
480-225375-1 MS	Effluent	Total Recoverable	Water	200.7 Rev 4.4	732306
480-225375-1 MSD	Effluent	Total Recoverable	Water	200.7 Rev 4.4	732306

General Chemistry

Analysis Batch: 732478

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-225375-1	Effluent	Total/NA	Water	SM 2540D	
480-225375-2	Influent	Total/NA	Water	SM 2540D	
MB 480-732478/1	Method Blank	Total/NA	Water	SM 2540D	
LCS 480-732478/2	Lab Control Sample	Total/NA	Water	SM 2540D	

Analysis Batch: 732782

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-225375-1	Effluent	Total/NA	Water	SM 4500 H+ B	
480-225375-2	Influent	Total/NA	Water	SM 4500 H+ B	
LCS 480-732782/23	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	

Lab Chronicle

Client: Waste Management
Job ID: 480-225375-1
Project/Site: ChemTrol Site - Monthly Groundwater

Client Sample ID: Effluent
Lab Sample ID: 480-225375-1
Date Collected: 11/12/24 09:30
Matrix: Water
Date Received: 11/12/24 10:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	624.1		1	732253	AXK	EET BUF	11/13/24 16:29
Total Recoverable	Prep	200.7			732306	ET	EET BUF	11/14/24 09:04
Total Recoverable	Analysis	200.7 Rev 4.4		1	732509	BMB	EET BUF	11/14/24 16:24
Total/NA	Analysis	SM 2540D		1	732478	KO	EET BUF	11/14/24 16:22
Total/NA	Analysis	SM 4500 H+ B		1	732782	KB	EET BUF	11/18/24 11:02

Client Sample ID: Influent
Lab Sample ID: 480-225375-2
Date Collected: 11/12/24 09:45
Matrix: Water
Date Received: 11/12/24 10:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	624.1		20	732253	AXK	EET BUF	11/13/24 16:54
Total Recoverable	Prep	200.7			732306	ET	EET BUF	11/14/24 09:04
Total Recoverable	Analysis	200.7 Rev 4.4		1	732509	BMB	EET BUF	11/14/24 16:33
Total/NA	Analysis	SM 2540D		1	732478	KO	EET BUF	11/14/24 16:22
Total/NA	Analysis	SM 4500 H+ B		1	732782	KB	EET BUF	11/18/24 11:08

Laboratory References:
EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Accreditation/Certification Summary

Client: Waste Management
Job ID: 480-225375-1
Project/Site: ChemTrol Site - Monthly Groundwater

Laboratory: Eurofins Buffalo

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
New York	NELAP	10026	03-31-25

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
624.1		Water	o-Chlorotoluene
SM 4500 H+ B		Water	pH
SM 4500 H+ B		Water	Temperature

Method Summary

Client: Waste Management
Project/Site: ChemTrol Site - Monthly Groundwater

Job ID: 480-225375-1

Method	Method Description	Protocol	Laboratory
624.1	Volatile Organic Compounds (GC/MS)	EPA	EET BUF
200.7 Rev 4.4	Metals (ICP)	EPA	EET BUF
SM 2540D	Solids, Total Suspended (TSS)	SM	EET BUF
SM 4500 H+ B	pH	SM	EET BUF
200.7	Preparation, Total Recoverable Metals	EPA	EET BUF

Protocol References:

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater"

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Sample Summary

Client: Waste Management
Job ID: 480-225375-1
Project/Site: ChemTrol Site - Monthly Groundwater

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-225375-1	Effluent	Water	11/12/24 09:30	11/12/24 10:45
480-225375-2	Influent	Water	11/12/24 09:45	11/12/24 10:45

Eurofins Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone: 716-691-2600 Fax: 716-691-7991

Chain of Custody Record

eurofins | Environment Testing

Client Information	Sampler: Chris Finn	Lab PM: VanDette, Ryan T	Carrier Tracking No(s):	COC No: 480-192453-28522.1
Client Contact: Chad Moose	Phone: 716-907-0596	E-Mail: Ryan.VanDette@et.eurofinsus.com	State of Origin: NY	Page: Page 1 of 1
Company: Waste Management	PWSID:			Job #:
Address: Tullytown Landfill 444 Oxford Valley Road	Due Date Requested:			
City: Morrisville	TAT Requested (days): Standard			
State, Zip: PA, 19067	Compliance Project: Δ Yes Δ No			
Phone: 215-269-2114(Tel) 215-699-8315(Fax)	PO #: 13453950			
Email: cmoose@wm.com	WO #:			
Project Name: ChemTrol Site/NY22 Event Desc: ChemTrol Monthly Groundwate	Project #: 48002447			
Site: New York	SSOW#:			

Analysis Requested

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	200.7 - Iron	624.1_PREC - 624	2540D - Total Suspended Solids	SM4500_H+ - pH	Total Number of containers	Special Instructions/Note:
Preservation Code:							D	A	N	N		
Effluent	11/12/24	0930	G	Water	W	N	1	3	1	1	6	
Influent	11/12/24	0945	G	Water	W	N	1	3	1	1	6	
Trip Blank	11/12/24	—	G	Water	W	N		1			1	

Preservation Codes:
D - HNO3
A - HCL
N - None

Other:

480-225375 Chain of Custody

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if san
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:
Relinquished by:	Date/Time: 11/12/24 1045	Company AECOM	Received by:	Date/Time 11/12/24 1045	Company TA
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 2.9 TR#S CICE

Ver: 10/10/2024

ANALYTICAL REPORT

Lab Number:	L2500908
Client:	Waste Management - Chem Trol 600 New Ludlow Rd South Hadley, MA 01075
ATTN:	Ryan Donavan
Phone:	(413) 275-1522
Project Name:	CHEMTROL MONTHLY GROUNDWATER
Project Number:	WM CHEMTROL MONTH GW
Report Date:	01/23/25

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0826), IL (200077), IN (C-MA-03), KY (KY98045), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), OR (MA-1316), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #525-23-122-91930A1).

Project Name: CHEMTROL MONTHLY GROUNDWATER
Project Number: WM CHEMTROL MONTH GW

Lab Number: L2500908
Report Date: 01/23/25

Lab Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2500908-01	EFFLUENT	WATER	TOWN OF HAMBURG, NY	01/08/25 09:50	01/08/25
L2500908-02	INFLUENT	WATER	TOWN OF HAMBURG, NY	01/08/25 10:10	01/08/25
L2500908-03	TRIP BLANK	WATER	TOWN OF HAMBURG, NY	01/08/25 00:00	01/08/25

Project Name:	CHEMTROL MONTHLY GROUNDWATER	**Lab Number:**	L2500908
Project Number:	WM CHEMTROL MONTH GW	**Report Date:**	01/23/25

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Pace Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments and solids are reported on a dry weight basis unless otherwise noted. Tissues are reported "as received" or on a wet weight basis, unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Pace's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Pace Project Manager and made arrangements for Pace to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name:	CHEMTROL MONTHLY GROUNDWATER	**Lab Number:**	L2500908
Project Number:	WM CHEMTROL MONTH GW	**Report Date:**	01/23/25

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Solids, Total Suspended

The Effluent (L2500908-02) result is greater than the Influent (L2500908-01) result.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Melissa Sturgis Melissa Sturgis

Title: Technical Director/Representative Date: 01/23/25

ORGANICS

VOLATILES

Project Name: CHEMTROL MONTHLY GROUNDWATER **Lab Number:** L2500908

Project Number: WM CHEMTROL MONTH **Report Date:** 01/23/25

SAMPLE RESULTS

Lab ID: L2500908-01
Client ID: EFFLUENT
Sample Location: TOWN OF HAMBURG, NY

Date Collected: 01/08/25 09:50
Date Received: 01/08/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 128,624.1
Analytical Date: 01/11/25 15:52
Analyst: AJK

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,1-Dichloroethane	1.6		ug/l	5.0	0.40	1
Chlorobenzene	ND		ug/l	5.0	0.30	1
1,1,1-Trichloroethane	ND		ug/l	5.0	0.29	1
Benzene	ND		ug/l	5.0	0.38	1
Toluene	ND		ug/l	5.0	0.31	1
Chloroethane	ND		ug/l	5.0	0.37	1
1,1-Dichloroethene	ND		ug/l	5.0	0.31	1
cis-1,2-Dichloroethene	ND		ug/l	5.0	0.17	1
Trichloroethene	ND		ug/l	5.0	0.33	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Pentafluorobenzene	96		60-140
Fluorobenzene	92		60-140
4-Bromofluorobenzene	94		60-140

Project Name: CHEMTROL MONTHLY GROUNDWATER **Lab Number:** L2500908

Project Number: WM CHEMTROL MONTH **Report Date:** 01/23/25

SAMPLE RESULTS

Lab ID: L2500908-01
Client ID: EFFLUENT
Sample Location: TOWN OF HAMBURG, NY

Date Collected: 01/08/25 09:50
Date Received: 01/08/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 128,624.1
Analytical Date: 01/11/25 15:52
Analyst: AJK

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
o-Chlorotoluene	0.99	J	ug/l	5.0	0.28	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Pentafluorobenzene	92		60-140
Fluorobenzene	102		60-140
4-Bromofluorobenzene	85		60-140

Project Name: CHEMTROL MONTHLY GROUNDWATER **Lab Number:** L2500908

Project Number: WM CHEMTROL MONTH **Report Date:** 01/23/25

SAMPLE RESULTS

Lab ID: L2500908-02
Client ID: INFLUENT
Sample Location: TOWN OF HAMBURG, NY

Date Collected: 01/08/25 10:10
Date Received: 01/08/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 128,624.1
Analytical Date: 01/11/25 16:56
Analyst: AJK

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,1-Dichloroethane	44		ug/l	5.0	0.40	1
Chlorobenzene	ND		ug/l	5.0	0.30	1
1,1,1-Trichloroethane	4.8		ug/l	5.0	0.29	1
Benzene	0.87	J	ug/l	5.0	0.38	1
Toluene	ND		ug/l	5.0	0.31	1
Chloroethane	27		ug/l	5.0	0.37	1
1,1-Dichloroethene	2.2		ug/l	5.0	0.31	1
cis-1,2-Dichloroethene	3.1		ug/l	5.0	0.17	1
Trichloroethene	3.1		ug/l	5.0	0.33	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Pentafluorobenzene	104		60-140
Fluorobenzene	98		60-140
4-Bromofluorobenzene	97		60-140

Project Name: CHEMTROL MONTHLY GROUNDWATER **Lab Number:** L2500908

Project Number: WM CHEMTROL MONTH **Report Date:** 01/23/25

SAMPLE RESULTS

Lab ID: L2500908-02 D
Client ID: INFLUENT
Sample Location: TOWN OF HAMBURG, NY

Date Collected: 01/08/25 10:10
Date Received: 01/08/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 128,624.1
Analytical Date: 01/13/25 13:19
Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
o-Chlorotoluene	440		ug/l	10	2.8	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Pentafluorobenzene	94		60-140
Fluorobenzene	99		60-140
4-Bromofluorobenzene	92		60-140

Project Name: CHEMTROL MONTHLY GROUNDWATER **Lab Number:** L2500908

Project Number: WM CHEMTROL MONTH **Report Date:** 01/23/25

SAMPLE RESULTS

Lab ID: L2500908-03
Client ID: TRIP BLANK
Sample Location: TOWN OF HAMBURG, NY

Date Collected: 01/08/25 00:00
Date Received: 01/08/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 128,624.1
Analytical Date: 01/11/25 16:24
Analyst: AJK

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,1-Dichloroethane	ND		ug/l	5.0	0.40	1
Chlorobenzene	ND		ug/l	5.0	0.30	1
1,1,1-Trichloroethane	ND		ug/l	5.0	0.29	1
Benzene	ND		ug/l	5.0	0.38	1
Toluene	ND		ug/l	5.0	0.31	1
Chloroethane	ND		ug/l	5.0	0.37	1
1,1-Dichloroethene	ND		ug/l	5.0	0.31	1
cis-1,2-Dichloroethene	ND		ug/l	5.0	0.17	1
Trichloroethene	ND		ug/l	5.0	0.33	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Pentafluorobenzene	106		60-140
Fluorobenzene	97		60-140
4-Bromofluorobenzene	95		60-140

Project Name: CHEMTROL MONTHLY GROUNDWATER **Lab Number:** L2500908

Project Number: WM CHEMTROL MONTH **Report Date:** 01/23/25

SAMPLE RESULTS

Lab ID: L2500908-03
Client ID: TRIP BLANK
Sample Location: TOWN OF HAMBURG, NY

Date Collected: 01/08/25 00:00
Date Received: 01/08/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 128,624.1
Analytical Date: 01/11/25 16:24
Analyst: AJK

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
o-Chlorotoluene	ND		ug/l	5.0	0.28	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Pentafluorobenzene	96		60-140
Fluorobenzene	102		60-140
4-Bromofluorobenzene	86		60-140

Project Name: CHEMTROL MONTHLY GROUNDWATER **Lab Number:** L2500908

Project Number: WM CHEMTROL MONTH GW **Report Date:** 01/23/25

Method Blank Analysis
Batch Quality Control

Analytical Method: 128,624.1
Analytical Date: 01/11/25 11:37
Analyst: LAC

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-03 Batch: WG2019176-4					
1,1-Dichloroethane	ND		ug/l	5.0	0.40
Chlorobenzene	ND		ug/l	5.0	0.30
1,1,1-Trichloroethane	ND		ug/l	5.0	0.29
Benzene	ND		ug/l	5.0	0.38
Toluene	ND		ug/l	5.0	0.31
Chloroethane	ND		ug/l	5.0	0.37
1,1-Dichloroethene	ND		ug/l	5.0	0.31
cis-1,2-Dichloroethene	ND		ug/l	5.0	0.17
Trichloroethene	ND		ug/l	5.0	0.33

Surrogate	%Recovery	Qualifier	Acceptance Criteria
Pentafluorobenzene	100		60-140
Fluorobenzene	96		60-140
4-Bromofluorobenzene	92		60-140

Project Name:	CHEMTROL MONTHLY GROUNDWATER	**Lab Number:**	L2500908
Project Number:	WM CHEMTROL MONTH GW	**Report Date:**	01/23/25

Method Blank Analysis
Batch Quality Control

Analytical Method: 128,624.1
Analytical Date: 01/13/25 11:11
Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 02 Batch: WG2019688-4					
o-Chlorotoluene	ND		ug/l	5.0	0.28

Surrogate	%Recovery	Qualifier	Acceptance Criteria
Pentafluorobenzene	90		60-140
Fluorobenzene	96		60-140
4-Bromofluorobenzene	104		60-140

Project Name: CHEMTROL MONTHLY GROUNDWATER **Lab Number:** L2500908

Project Number: WM CHEMTROL MONTH GW **Report Date:** 01/23/25

Method Blank Analysis
Batch Quality Control

Analytical Method: 128,624.1
Analytical Date: 01/11/25 11:37
Analyst: LAC

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01,03 Batch: WG2019689-4					
o-Chlorotoluene	ND		ug/l	5.0	0.28

Surrogate	%Recovery	Qualifier	Acceptance Criteria
Pentafluorobenzene	91		60-140
Fluorobenzene	102		60-140
4-Bromofluorobenzene	83		60-140

Lab Control Sample Analysis
Batch Quality Control

Project Name: CHEMTROL MONTHLY GROUNDWATER
Project Number: WM CHEMTROL MONTH GW

Lab Number: L2500908
Report Date: 01/23/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 Batch: WG2019176-3								
1,1-Dichloroethane	110		-		50-150	-		49
Chlorobenzene	85		-		65-135	-		53
1,1,1-Trichloroethane	110		-		70-130	-		36
Benzene	105		-		65-135	-		61
Toluene	95		-		70-130	-		41
Chloroethane	130		-		40-160	-		78
1,1-Dichloroethene	110		-		50-150	-		32
cis-1,2-Dichloroethene	100		-		60-140	-		30
Trichloroethene	105		-		65-135	-		48

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
Pentafluorobenzene	103				60-140
Fluorobenzene	102				60-140
4-Bromofluorobenzene	99				60-140

Lab Control Sample Analysis
Batch Quality Control

Project Name: CHEMTROL MONTHLY GROUNDWATER
Project Number: WM CHEMTROL MONTH GW

Lab Number: L2500908
Report Date: 01/23/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02 Batch: WG2019688-3								
o-Chlorotoluene	110		-		60-140	-		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
Pentafluorobenzene	105				60-140
Fluorobenzene	93				60-140
4-Bromofluorobenzene	103				60-140

Lab Control Sample Analysis
Batch Quality Control

Project Name: CHEMTROL MONTHLY GROUNDWATER
Project Number: WM CHEMTROL MONTH GW

Lab Number: L2500908
Report Date: 01/23/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01,03 Batch: WG2019689-3								
o-Chlorotoluene	90		-		60-140	-		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
Pentafluorobenzene	98				60-140
Fluorobenzene	102				60-140
4-Bromofluorobenzene	91				60-140

METALS

Project Name: CHEMTROL MONTHLY GROUNDWATER **Lab Number:** L2500908

Project Number: WM CHEMTROL MONTH GW **Report Date:** 01/23/25

SAMPLE RESULTS

Lab ID: L2500908-01 Date Collected: 01/08/25 09:50

Client ID: EFFLUENT Date Received: 01/08/25

Sample Location: TOWN OF HAMBURG, NY Field Prep: Not Specified

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Iron, Total Recoverable	708.		ug/l	50.0	9.00	1	01/10/25 02:02	01/10/25 17:08	EPA 3005A	19,200.7	EFM

Project Name: CHEMTROL MONTHLY GROUNDWATER **Lab Number:** L2500908

Project Number: WM CHEMTROL MONTH GW **Report Date:** 01/23/25

SAMPLE RESULTS

Lab ID: L2500908-02 Date Collected: 01/08/25 10:10

Client ID: INFLUENT Date Received: 01/08/25

Sample Location: TOWN OF HAMBURG, NY Field Prep: Not Specified

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Iron, Total Recoverable	2960		ug/l	50.0	9.00	1	01/10/25 02:02	01/10/25 17:54	EPA 3005A	19,200.7	EFM

Project Name: CHEMTROL MONTHLY GROUNDWATER **Lab Number:** L2500908

Project Number: WM CHEMTROL MONTH **Report Date:** 01/23/25

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01-02 Batch: WG2020904-1										
Iron, Total	ND		ug/l	50.0	9.00	1	01/10/25 02:02	01/10/25 16:50	19,200.7	EFM

Prep Information

Digestion Method: EPA 3005A

Lab Control Sample Analysis
Batch Quality Control

Project Name: CHEMTROL MONTHLY GROUNDWATER
Project Number: WM CHEMTROL MONTH GW

Lab Number: L2500908
Report Date: 01/23/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-02 Batch: WG2020904-2								
Iron, Total	97		-		85-115	-		

Matrix Spike Analysis
Batch Quality Control

Project Name: CHEMTROL MONTHLY GROUNDWATER
Project Number: WM CHEMTROL MONTH GW

Lab Number: L2500908
Report Date: 01/23/25

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG2020904-3 QC Sample: L2500778-06 Client ID: MS Sample												
Iron, Total	6820	1000	7780	96		-	-		75-125	-		20

Lab Duplicate Analysis

Batch Quality Control

Project Name: CHEMTROL MONTHLY GROUNDWATER
Project Number: WM CHEMTROL MONTH GW

Lab Number: L2500908
Report Date: 01/23/25

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG2020904-4 QC Sample: L2500778-06 Client ID: DUP Sample						
Iron, Total	6820	7110	ug/l	4		20

INORGANICS
&
MISCELLANEOUS

Project Name: CHEMTROL MONTHLY GROUNDWATER
Project Number: WM CHEMTROL MONTH GW

Lab Number: L2500908
Report Date: 01/23/25

SAMPLE RESULTS

Lab ID: L2500908-01
Client ID: EFFLUENT
Sample Location: TOWN OF HAMBURG, NY

Date Collected: 01/08/25 09:50
Date Received: 01/08/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Total Suspended Solids	10.		mg/l	4.0	NA	1	-	01/11/25 18:27	121,2540D	REM

Project Name: CHEMTROL MONTHLY GROUNDWATER
Project Number: WM CHEMTROL MONTH GW

Lab Number: L2500908
Report Date: 01/23/25

SAMPLE RESULTS

Lab ID: L2500908-02
Client ID: INFLUENT
Sample Location: TOWN OF HAMBURG, NY

Date Collected: 01/08/25 10:10
Date Received: 01/08/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Total Suspended Solids	5.0		mg/l	4.0	NA	1	-	01/11/25 18:27	121,2540D	REM

Project Name: CHEMTROL MONTHLY GROUNDWAT **Lab Number:** L2500908

Project Number: WM CHEMTROL MONTH GW **Report Date:** 01/23/25

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 01-02 Batch: WG2018892-1										
Solids, Total Suspended	ND		mg/l	1.0	NA	1	-	01/11/25 18:27	121,2540D	REM

Lab Control Sample Analysis
Batch Quality Control

Project Name: CHEMTROL MONTHLY GROUNDWATER
Project Number: WM CHEMTROL MONTH GW

Lab Number: L2500908
Report Date: 01/23/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-02 Batch: WG2018892-2								
Solids, Total Suspended	103		-		80-120	-		

Lab Duplicate Analysis

Batch Quality Control

Project Name: CHEMTROL MONTHLY GROUNDWATER
Project Number: WM CHEMTROL MONTH GW

Lab Number: L2500908
Report Date: 01/23/25

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG2018892-3 QC Sample: L2501361-01 Client ID: DUP Sample						
Solids, Total Suspended	270	270	mg/l	0		32
General Chemistry - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG2018892-4 QC Sample: L2501371-01 Client ID: DUP Sample						
Solids, Total Suspended	620	660	mg/l	6		32

Field Data Summary

Field Data Summary

Project Name: CHEMTROL MONTHLY GROUNDWATER
Project Number: WM CHEMTROL MC

Lab Number: L2500908
Report Date: 01/23/25

Parameter	Result	Units
Sample: L2500908-01 Client ID: EFFLUENT		
Field, pH	7.77	std
Field, Temperature	7.6	c
Sample: L2500908-02 Client ID: INFLUENT		
Field, pH	7.70	std
Field, Temperature	7.1	c

Project Name: CHEMTROL MONTHLY GROUNDWATER
Project Number: WM CHEMTROL MONTH GW

Lab Number: L2500908
Report Date: 01/23/25

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2500908-01A	Vial Na2S2O3 preserved	A	NA		3.4	Y	Absent		624.1(7)
L2500908-01B	Vial Na2S2O3 preserved	A	NA		3.4	Y	Absent		624.1(7)
L2500908-01C	Vial Na2S2O3 preserved	A	NA		3.4	Y	Absent		624.1(7)
L2500908-01D	Plastic 250ml HNO3 preserved	A	<2	<2	3.4	Y	Absent		FE-UI-PPB(180)
L2500908-01E	Plastic 950ml unpreserved	A	7	7	3.4	Y	Absent		TSS-2540-LOW(7)
L2500908-02A	Vial Na2S2O3 preserved	A	NA		3.4	Y	Absent		624.1(7)
L2500908-02B	Vial Na2S2O3 preserved	A	NA		3.4	Y	Absent		624.1(7)
L2500908-02C	Vial Na2S2O3 preserved	A	NA		3.4	Y	Absent		624.1(7)
L2500908-02D	Plastic 250ml HNO3 preserved	A	<2	<2	3.4	Y	Absent		-
L2500908-02E	Plastic 950ml unpreserved	A	7	7	3.4	Y	Absent		TSS-2540-LOW(7)
L2500908-03A	Vial Na2S2O3 preserved	A	NA		3.4	Y	Absent		624.1(7)
L2500908-03B	Vial Na2S2O3 preserved	A	NA		3.4	Y	Absent		624.1(7)

*Values in parentheses indicate holding time in days

Project Name:	CHEMTROL MONTHLY GROUNDWATER	**Lab Number:**	L2500908
Project Number:	WM CHEMTROL MONTH G	**Report Date:**	01/23/25

GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: DU Report with 'J' Qualifiers

Project Name:	CHEMTROL MONTHLY GROUNDWATER	**Lab Number:**	L2500908
Project Number:	WM CHEMTROL MONTH G	**Report Date:**	01/23/25

Footnotes

1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Chlordane: The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA,this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

A - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.

B - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

F - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

J - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively

Report Format: DU Report with 'J' Qualifiers

Project Name:	CHEMTROL MONTHLY GROUNDWATER	**Lab Number:**	L2500908
Project Number:	WM CHEMTROL MONTH G	**Report Date:**	01/23/25

Data Qualifiers

Identified Compounds (TICs). For calculated parameters, this represents that one or more values used in the calculation were estimated.

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

ND - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

V - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Z - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

REFERENCES

19 Inductively Coupled Plasma Atomic Emission Spectrometric Method for Trace Element Analysis of Water and Wastes. Appendix C, Part 136, 40 CFR (Code of Federal Regulations). July 1, 1999 edition.

121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.

128 Method 624.1: Purgeables by GC/MS, EPA 821-R-16-008, December 2016.

LIMITATION OF LIABILITIES

Pace Analytical Services performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Pace Analytical Services shall be to re-perform the work at it's own expense. In no event shall Pace Analytical Services be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Pace Analytical Services.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581
EPA 624.1: m/p-xylene, o-xylene, Naphthalene
EPA 625.1: alpha-Terpineol
EPA 8260D: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270E: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine, alpha-Terpineol, Azobenzene; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048
SM 2540D: TSS.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
MADEP-APH.
Nonpotable Water: EPA RSK-175 Dissolved Gases
Biological Tissue Matrix: EPA 3050B

Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
Nonpotable Water: EPA RSK-175 Dissolved Gases

The following test method is not included in our New Jersey Secondary NELAP Scope of Accreditation:

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048
Alpha SOP 23528

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581

Drinking Water
EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B**
EPA 524.2: THMs and VOCs; **EPA 504.1:** EDB, DBCP.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D**.

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2**: Nitrate-N**, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.**
EPA 624.1: Volatile Halocarbons & Aromatics,
EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625.1: SVOC (Acid/Base/Neutral Extractables).
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, EPA 1600, EPA 1603, SM9222D.**

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048

Drinking Water
EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.
EPA 522, EPA 537.1.

Non-Potable Water
EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.
EPA 200.8: Al, Sb**,** As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.
EPA 245.1 Hg.
SM2340B

For a complete listing of analytes and methods, please contact your Project Manager.

Pace® Location Requested (City/State): **Westborough**

CHAIN-OF-CUSTODY Analytical Request Document

Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevant fields

LAB USE ONLY- Affix Workorder/Login Label Here

L2500908

Scan QR Code for instructions

Company Name: Waste Management

Street Address: 600 New Ludlow Road, South Hadley, MA 01075

Customer Project #: Chemtrol Monthly GW (1,3,5,7,9,11)

Project Name: WM Chemtrol Month GW

Site Collection Info/Facility ID (as applicable):

Contact/Report To: Ryan Donovan

Phone #: 413-427-4432

E-Mail: edonovan@wm.com

Cc E-Mail:

Invoice to: Ryan Donovan

Invoice E-mail: edonovan@wm.com (load to Coupa)

Purchase Order # (if applicable):

Quote #: WM account

Time Zone Collected: [ ] AK [ ] PT [ ] MT [ ] CT [X] ET

County / State origin of sample(s): MA

Data Deliverables: [X] Level II [ ] Level III [ ] Level IV [X] EQUIS [ ] Other upload to WM

Regulatory Program (DW, RCRA, etc.) as applicable: Permit

Reportable [ ] Yes [ ] No

Rush (Pre-approval required): [ ] Same Day [ ] 1 Day [ ] 2 Day [ ] 3 Day Other

Date Results Requested: 10 BD

DW PWSID # or WW Permit # as applicable:

Field Filtered (if applicable): [ ] Yes [ ] No

Analysis:

Specify Container Size **: 6 3 1

Identify Container Preservative Type***: 8 2 1

Analysis Requested

**Container Size: (1) 1L, (2) 500mL, (3) 250mL, (4) 125mL, (5) 100mL, (6) 40mL vial, (7) EnCore, (8) TerraCore, (9) 90mL, (10) Other

*** Preservative Types: (1) None, (2) HNO3, (3) H2SO4, (4) HCl, (5) NaOH, (6) Zn Acetate, (7) NaHSO4, (8) Sod. Thiosulfate, (9) Ascorbic Acid, (10) MeOH, (11) Other

* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Wastewater (WW), Product (P), Soil/Solid (SS), Oil (OL), Wipe (WP), Tissue (TS), Bioassay (B), Vapor (V), Surface Water (SW), Sediment (SED), Sludge (SL), Caulk (CK), Leachate (LL), Biosolid (BS), Other (OT)

Customer Sample ID	Matrix *	Comp / Grab	Composite Start Date	Composite Start Time	Collected or Composite End Date	Collected or Composite End Time	# Cont.	Residual Chlorine Result	Residual Chlorine Units	624.1 (see permit) for list	TR Metals (Fe)	TSS	Field pH	Field Temp.	Sample Comment	Preservation non-conformance identified for sample.
Effluent	W	G	~~1/9/25~~	~~0950~~ T.U	1/8/25	0950	5			X	X	X	X	X		
Influent	W	G	~~1/9/25~~	T.U	1/8/25	1010	5			X	X	X	X	X		
Trip Blank	W	G	~~1/9/25~~	T.U	1/8/25	-	2			X						

Lab Use Only: Proj. Mgr: Canace Fox; AcctNum / Client ID: WM-Chemtrol; Table #:; Profile / Template: CHEMTROL-M; Prelog / Bottle Ord. ID:

Additional Instructions from Pace®: Report metal: As total recoverable.

Collected By: Printed Name TOM UHDEN; Signature Tom Uhden

Customer Remarks / Special Conditions / Possible Hazards: additional Report to: Jim Kaczor @ AEMCOM: james.kaczor@aecom.com

Coolers: Thermometer ID: Correction Factor (°C): Obs. Temp. (°C): Corrected Temp. (°C): [ ] On Ice

Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:
Tom Uhden / AECOM	1/8/25 @ 11:13	Charles Pinkey	1-8-25 11:13
Charles Pinkey pace	1-8-25 @ 11:18	Buffalo SC	1-8-25 11:18
Russell B Bisby	1-8-25 15:38		

Tracking Number:

Delivered by: [ ] In-Person [ ] Courier [ ] FedEx [ ] UPS [ ] Other

01709125-010

Page: 1 of 1

Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace® Terms and Conditions found at https://info.pacelabs.com/hubfs/pas-standard-terms.pdf.

ENV-FRM-CORC-0019_v02_110123 ©

FIELD INFORMATION FORM

Surface Water, Stormwater and Leachate

WASTE MANAGEMENT

Site Name: Chem Trol

Sample I.D. INF

Laboratory Use Only / Lab I.D.:

Sampling Method & Equipment

Purge and Sample Equipment:

Sampling Method: D — (D - Direct / I - Indirect / V - Visual)

Sampling Equipment: S — (D - Dipper / T - Transfer Vessel / S - Sample Bottle / O - Other)

Sample Type: G — (Grab / Composite) (circle one)

Field Measurements

Sample Date MM/DD/YYYY	Sample Time 24 Hr. Clock	pH (std. Units)	CONDUCTIVITY (umhos/cm @ 25°C)	Temp °C	TURBIDITY (NTUs)	DO mg/L - ppm	eH/ORP (std. Units)
01/08/2025	1010	7.70	—	7.1	—	—	—

Record final stabilized field readings.

Field Observations

Sample Appearance: Odor: slight-decay Color: clear Other:

Sheen Present [Y] or [N] Foam Present: [Y] or [N] Floating Solids: [Y] or [N]

Weather Conditions: (required daily, or as conditions change):

Direction/Speed: NW/10 mph Precipitation: [Y] or [N]

Specific Comments:

Date	Name	Signature	Company
1/8/25	Tom Urban	Tom Urban	AECOM

FIELD INFORMATION FORM

Surface Water, Stormwater and Leachate

WASTE MANAGEMENT

Laboratory Use Only / Lab I.D.: _____

Site Name: Chem Trol

Sample I.D.: EFF

Sampling Method & Equipment

Purge and Sample Equipment:

Sampling Method: D (D - Direct / I - Indirect / V - Visual)

Sampling Equipment: S (D - Dipper / T - Transfer Vessel / S - Sample Bottle / O - Other _____)

Sample Type: G (Grab / Composite) (circle one)

Field Measurements

Sample Date MM/DD/YYYY	Sample Time 24 Hr. Clock	pH (std. Units)	CONDUCTIVITY (umhos/cm @ 25°C)	Temp °C	TURBIDITY (NTUs)	DO mg/L - ppm	eH/ORP (std. Units)
01/08/2025	0950	7.77	—	7.6	—	—	—

Record final stabilized field readings.

Field Observations

Sample Appearance: Odor: none Color: clear Other: _____

Sheen Present: Y or (N) Foam Present: Y or (N) Floating Solids: Y or (N)

Weather Conditions: (required daily, or as conditions change):

Direction/Speed: NW/10 mph Precipitation: Y or (N)

Specific Comments: _____

Date	Name	Signature	Company
1/8/25	Tom Urban	Tom Urban	AECOM

ATTACHMENT D

September 2024 Bi-Annual Groundwater Monitoring Analytical Report

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Ryan Donovan
Waste Management
600 New Ludlow Road
South Hadley, Massachusetts 01075

Generated 10/2/2024 2:51:32 PM

JOB DESCRIPTION

ChemTrol Site - Groundwater
ChemTrol Annual Groundwater (9-Even yrs)

JOB NUMBER

480-223722-1

Eurofins Buffalo
10 Hazelwood Drive
Amherst NY 14228-2298

See page two for job notes and contact information.

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Northeast, LLC Project Manager.

Authorization

Generated
10/2/2024 2:51:32 PM

Authorized for release by
Gale Prinster, Project Mgmt. Assistant
gale.prinster@et.eurofinsus.com
Designee for
Ryan VanDette, Project Manager II
Ryan.VanDette@et.eurofinsus.com
(716)504-9830

Table of Contents

Definitions/Glossary

Client: Waste Management
Project/Site: ChemTrol Site - Groundwater

Job ID: 480-223722-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job Narrative
480-223722-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 9/25/2024 3:22 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 4.0°C.

GC/MS VOA
Method 8260C: The method requirement for no headspace was not met. The following volatile sample was analyzed with headspace in the sample container(s): TB-092524 (480-223722-1).

Method 8260C: The continuing calibration verification (CCV) associated with batch 480-726431 recovered above the upper control limit for Trichlorofluoromethane. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated samples are impacted: TB-092524 (480-223722-1), FD-092524 (480-223722-2), MW-13R (480-223722-3), MW-15R (480-223722-4), MW-3S (480-223722-5), MW-7R (480-223722-6), MW-8R (480-223722-7) and MW-9R (480-223722-8).

Method 8260C: The following samples were diluted to bring the concentration of target analytes within the calibration range: MW-13R (480-223722-3), MW-3S (480-223722-5), MW-8R (480-223722-7) and MW-9R (480-223722-8). Elevated reporting limits (RLs) are provided.

Method 8260C: The following volatiles sample was diluted due to foaming at the time of purging during the original sample analysis: MW-15R (480-223722-4). Elevated reporting limits (RLs) are provided.

Method 8260C: The following sample was diluted to bring the concentration of target analytes within the calibration range: FD-092524 (480-223722-2). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Detection Summary

Client: Waste Management
Project/Site: ChemTrol Site - Groundwater

Job ID: 480-223722-1

Client Sample ID: TB-092524 — Lab Sample ID: 480-223722-1

No Detections.

Client Sample ID: FD-092524 — Lab Sample ID: 480-223722-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
o-Chlorotoluene - DL	1100		34		ug/L	40		8260C	Total/NA

Client Sample ID: MW-13R — Lab Sample ID: 480-223722-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
o-Chlorotoluene	1400		34		ug/L	40		8260C	Total/NA

Client Sample ID: MW-15R — Lab Sample ID: 480-223722-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cyclohexane	31		5.0		ug/L	2		8260C	Total/NA
Methylcyclohexane	8.8		5.0		ug/L	2		8260C	Total/NA

Client Sample ID: MW-3S — Lab Sample ID: 480-223722-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
o-Chlorotoluene	77000		860		ug/L	1000		8260C	Total/NA

Client Sample ID: MW-7R — Lab Sample ID: 480-223722-6

No Detections.

Client Sample ID: MW-8R — Lab Sample ID: 480-223722-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
o-Chlorotoluene	100		5.0		ug/L	4		8260C	Total/NA

Client Sample ID: MW-9R — Lab Sample ID: 480-223722-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	160		5.0		ug/L	4		8260C	Total/NA
1,1-Dichloroethane	71		5.0		ug/L	4		8260C	Total/NA

This Detection Summary does not include radiochemical test results.

Client: Waste Management
Project/Site: ChemTrol Site - Groundwater

Job ID: 480-223722-1

Client Sample ID: TB-092524
Date Collected: 09/25/24 00:00
Date Received: 09/25/24 15:22

Lab Sample ID: 480-223722-1
Matrix: Water

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0		ug/L			09/28/24 05:48	1
1,1,2,2-Tetrachloroethane	ND		5.0		ug/L			09/28/24 05:48	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0		ug/L			09/28/24 05:48	1
1,1,2-Trichloroethane	ND		5.0		ug/L			09/28/24 05:48	1
1,1-Dichloroethane	ND		5.0		ug/L			09/28/24 05:48	1
1,2,4-Trichlorobenzene	ND		5.0		ug/L			09/28/24 05:48	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			09/28/24 05:48	1
1,2-Dibromoethane	ND		5.0		ug/L			09/28/24 05:48	1
1,2-Dichlorobenzene	ND		5.0		ug/L			09/28/24 05:48	1
1,2-Dichloroethane	ND		5.0		ug/L			09/28/24 05:48	1
1,2-Dichloropropane	ND		5.0		ug/L			09/28/24 05:48	1
1,3-Dichlorobenzene	ND		5.0		ug/L			09/28/24 05:48	1
1,4-Dichlorobenzene	ND		5.0		ug/L			09/28/24 05:48	1
2-Butanone (MEK)	ND		25		ug/L			09/28/24 05:48	1
o-Chlorotoluene	ND		5.0		ug/L			09/28/24 05:48	1
2-Hexanone	ND		25		ug/L			09/28/24 05:48	1
4-Methyl-2-pentanone (MIBK)	ND		25		ug/L			09/28/24 05:48	1
Acetone	ND		25		ug/L			09/28/24 05:48	1
Benzene	ND		5.0		ug/L			09/28/24 05:48	1
Bromoform	ND		5.0		ug/L			09/28/24 05:48	1
Bromomethane	ND		5.0		ug/L			09/28/24 05:48	1
Carbon disulfide	ND		5.0		ug/L			09/28/24 05:48	1
Carbon tetrachloride	ND		5.0		ug/L			09/28/24 05:48	1
Chlorobenzene	ND		5.0		ug/L			09/28/24 05:48	1
Chlorodibromomethane	ND		5.0		ug/L			09/28/24 05:48	1
Chloroethane	ND		5.0		ug/L			09/28/24 05:48	1
Chloroform	ND		5.0		ug/L			09/28/24 05:48	1
Chloromethane	ND		5.0		ug/L			09/28/24 05:48	1
cis-1,2-Dichloroethene	ND		5.0		ug/L			09/28/24 05:48	1
cis-1,3-Dichloropropene	ND		5.0		ug/L			09/28/24 05:48	1
Cyclohexane	ND		5.0		ug/L			09/28/24 05:48	1
Bromodichloromethane	ND		5.0		ug/L			09/28/24 05:48	1
Dichlorofluoromethane	ND		5.0		ug/L			09/28/24 05:48	1
Ethylbenzene	ND		5.0		ug/L			09/28/24 05:48	1
Isopropylbenzene	ND		5.0		ug/L			09/28/24 05:48	1
Methyl acetate	ND		5.0		ug/L			09/28/24 05:48	1
Methyl tert-butyl ether	ND		5.0		ug/L			09/28/24 05:48	1
Methylcyclohexane	ND		5.0		ug/L			09/28/24 05:48	1
Methylene Chloride	ND		5.0		ug/L			09/28/24 05:48	1
Styrene	ND		5.0		ug/L			09/28/24 05:48	1
Tetrachloroethene	ND		5.0		ug/L			09/28/24 05:48	1
Toluene	ND		5.0		ug/L			09/28/24 05:48	1
trans-1,2-Dichloroethene	ND		5.0		ug/L			09/28/24 05:48	1
trans-1,3-Dichloropropene	ND		5.0		ug/L			09/28/24 05:48	1
Trichloroethene	ND		5.0		ug/L			09/28/24 05:48	1
Trichlorofluoromethane	ND		5.0		ug/L			09/28/24 05:48	1
Vinyl chloride	ND		5.0		ug/L			09/28/24 05:48	1
Xylenes, Total	ND		15		ug/L			09/28/24 05:48	1

Client Sample Results

Client: Waste Management
Project/Site: ChemTrol Site - Groundwater

Job ID: 480-223722-1

Client Sample ID: TB-092524
Date Collected: 09/25/24 00:00
Date Received: 09/25/24 15:22

Lab Sample ID: 480-223722-1
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		77 - 120		09/28/24 05:48	1
Toluene-d8 (Surr)	102		80 - 120		09/28/24 05:48	1
4-Bromofluorobenzene (Surr)	94		73 - 120		09/28/24 05:48	1
Dibromofluoromethane (Surr)	101		75 - 123		09/28/24 05:48	1

Client Sample ID: FD-092524

Date Collected: 09/25/24 00:00
Date Received: 09/25/24 15:22

Lab Sample ID: 480-223722-2

Matrix: Water

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0		ug/L			09/28/24 06:10	1
1,1,2,2-Tetrachloroethane	ND		5.0		ug/L			09/28/24 06:10	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0		ug/L			09/28/24 06:10	1
1,1,2-Trichloroethane	ND		5.0		ug/L			09/28/24 06:10	1
1,1-Dichloroethane	ND		5.0		ug/L			09/28/24 06:10	1
1,2,4-Trichlorobenzene	ND		5.0		ug/L			09/28/24 06:10	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			09/28/24 06:10	1
1,2-Dibromoethane	ND		5.0		ug/L			09/28/24 06:10	1
1,2-Dichlorobenzene	ND		5.0		ug/L			09/28/24 06:10	1
1,2-Dichloroethane	ND		5.0		ug/L			09/28/24 06:10	1
1,2-Dichloropropane	ND		5.0		ug/L			09/28/24 06:10	1
1,3-Dichlorobenzene	ND		5.0		ug/L			09/28/24 06:10	1
1,4-Dichlorobenzene	ND		5.0		ug/L			09/28/24 06:10	1
2-Butanone (MEK)	ND		25		ug/L			09/28/24 06:10	1
2-Hexanone	ND		25		ug/L			09/28/24 06:10	1
4-Methyl-2-pentanone (MIBK)	ND		25		ug/L			09/28/24 06:10	1
Acetone	ND		25		ug/L			09/28/24 06:10	1
Benzene	ND		5.0		ug/L			09/28/24 06:10	1
Bromoform	ND		5.0		ug/L			09/28/24 06:10	1
Bromomethane	ND		5.0		ug/L			09/28/24 06:10	1
Carbon disulfide	ND		5.0		ug/L			09/28/24 06:10	1
Carbon tetrachloride	ND		5.0		ug/L			09/28/24 06:10	1
Chlorobenzene	ND		5.0		ug/L			09/28/24 06:10	1
Chlorodibromomethane	ND		5.0		ug/L			09/28/24 06:10	1
Chloroethane	ND		5.0		ug/L			09/28/24 06:10	1
Chloroform	ND		5.0		ug/L			09/28/24 06:10	1
Chloromethane	ND		5.0		ug/L			09/28/24 06:10	1
cis-1,2-Dichloroethene	ND		5.0		ug/L			09/28/24 06:10	1
cis-1,3-Dichloropropene	ND		5.0		ug/L			09/28/24 06:10	1
Cyclohexane	ND		5.0		ug/L			09/28/24 06:10	1
Bromodichloromethane	ND		5.0		ug/L			09/28/24 06:10	1
Dichlorofluoromethane	ND		5.0		ug/L			09/28/24 06:10	1
Ethylbenzene	ND		5.0		ug/L			09/28/24 06:10	1
Isopropylbenzene	ND		5.0		ug/L			09/28/24 06:10	1
Methyl acetate	ND		5.0		ug/L			09/28/24 06:10	1
Methyl tert-butyl ether	ND		5.0		ug/L			09/28/24 06:10	1
Methylcyclohexane	ND		5.0		ug/L			09/28/24 06:10	1
Methylene Chloride	ND		5.0		ug/L			09/28/24 06:10	1
Styrene	ND		5.0		ug/L			09/28/24 06:10	1
Tetrachloroethene	ND		5.0		ug/L			09/28/24 06:10	1
Toluene	ND		5.0		ug/L			09/28/24 06:10	1
trans-1,2-Dichloroethene	ND		5.0		ug/L			09/28/24 06:10	1
trans-1,3-Dichloropropene	ND		5.0		ug/L			09/28/24 06:10	1
Trichloroethene	ND		5.0		ug/L			09/28/24 06:10	1
Trichlorofluoromethane	ND		5.0		ug/L			09/28/24 06:10	1
Vinyl chloride	ND		5.0		ug/L			09/28/24 06:10	1
Xylenes, Total	ND		15		ug/L			09/28/24 06:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*77 - 120*		*09/28/24 06:10*	*1*

Client Sample ID: FD-092524
Date Collected: 09/25/24 00:00
Date Received: 09/25/24 15:22

Lab Sample ID: 480-223722-2
Matrix: Water

Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*101*		*80 - 120*		*09/28/24 06:10*	*1*
4-Bromofluorobenzene (Surr)	*94*		*73 - 120*		*09/28/24 06:10*	*1*
Dibromofluoromethane (Surr)	*99*		*75 - 123*		*09/28/24 06:10*	*1*

Method: SW846 8260C - Volatile Organic Compounds by GC/MS - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
o-Chlorotoluene	**1100**		34		ug/L			09/30/24 15:01	40

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*77 - 120*		*09/30/24 15:01*	*40*
Toluene-d8 (Surr)	*102*		*80 - 120*		*09/30/24 15:01*	*40*
4-Bromofluorobenzene (Surr)	*103*		*73 - 120*		*09/30/24 15:01*	*40*
Dibromofluoromethane (Surr)	*102*		*75 - 123*		*09/30/24 15:01*	*40*

Client: Waste Management
Project/Site: ChemTrol Site - Groundwater

Job ID: 480-223722-1

Client Sample ID: MW-13R
Date Collected: 09/25/24 10:20
Date Received: 09/25/24 15:22

Lab Sample ID: 480-223722-3
Matrix: Water

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		33		ug/L			09/28/24 06:33	40
1,1,2,2-Tetrachloroethane	ND		8.4		ug/L			09/28/24 06:33	40
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		12		ug/L			09/28/24 06:33	40
1,1,2-Trichloroethane	ND		9.2		ug/L			09/28/24 06:33	40
1,1-Dichloroethane	ND		15		ug/L			09/28/24 06:33	40
1,2,4-Trichlorobenzene	ND		16		ug/L			09/28/24 06:33	40
1,2-Dibromo-3-Chloropropane	ND		16		ug/L			09/28/24 06:33	40
1,2-Dibromoethane	ND		29		ug/L			09/28/24 06:33	40
1,2-Dichlorobenzene	ND		32		ug/L			09/28/24 06:33	40
1,2-Dichloroethane	ND		8.4		ug/L			09/28/24 06:33	40
1,2-Dichloropropane	ND		29		ug/L			09/28/24 06:33	40
1,3-Dichlorobenzene	ND		31		ug/L			09/28/24 06:33	40
1,4-Dichlorobenzene	ND		34		ug/L			09/28/24 06:33	40
2-Butanone (MEK)	ND		53		ug/L			09/28/24 06:33	40
o-Chlorotoluene	**1400**		34		ug/L			09/28/24 06:33	40
2-Hexanone	ND		50		ug/L			09/28/24 06:33	40
4-Methyl-2-pentanone (MIBK)	ND		84		ug/L			09/28/24 06:33	40
Acetone	ND		120		ug/L			09/28/24 06:33	40
Benzene	ND		16		ug/L			09/28/24 06:33	40
Bromoform	ND		10		ug/L			09/28/24 06:33	40
Bromomethane	ND		28		ug/L			09/28/24 06:33	40
Carbon disulfide	ND		7.6		ug/L			09/28/24 06:33	40
Carbon tetrachloride	ND		11		ug/L			09/28/24 06:33	40
Chlorobenzene	ND		30		ug/L			09/28/24 06:33	40
Chlorodibromomethane	ND		13		ug/L			09/28/24 06:33	40
Chloroethane	ND		13		ug/L			09/28/24 06:33	40
Chloroform	ND		14		ug/L			09/28/24 06:33	40
Chloromethane	ND		14		ug/L			09/28/24 06:33	40
cis-1,2-Dichloroethene	ND		32		ug/L			09/28/24 06:33	40
cis-1,3-Dichloropropene	ND		14		ug/L			09/28/24 06:33	40
Cyclohexane	ND		7.2		ug/L			09/28/24 06:33	40
Bromodichloromethane	ND		16		ug/L			09/28/24 06:33	40
Dichlorofluoromethane	ND		14		ug/L			09/28/24 06:33	40
Ethylbenzene	ND		30		ug/L			09/28/24 06:33	40
Isopropylbenzene	ND		32		ug/L			09/28/24 06:33	40
Methyl acetate	ND		52		ug/L			09/28/24 06:33	40
Methyl tert-butyl ether	ND		6.4		ug/L			09/28/24 06:33	40
Methylcyclohexane	ND		6.4		ug/L			09/28/24 06:33	40
Methylene Chloride	ND		18		ug/L			09/28/24 06:33	40
Styrene	ND		29		ug/L			09/28/24 06:33	40
Tetrachloroethene	ND		14		ug/L			09/28/24 06:33	40
Toluene	ND		20		ug/L			09/28/24 06:33	40
trans-1,2-Dichloroethene	ND		36		ug/L			09/28/24 06:33	40
trans-1,3-Dichloropropene	ND		15		ug/L			09/28/24 06:33	40
Trichloroethene	ND		18		ug/L			09/28/24 06:33	40
Trichlorofluoromethane	ND		35		ug/L			09/28/24 06:33	40
Vinyl chloride	ND		36		ug/L			09/28/24 06:33	40
Xylenes, Total	ND		26		ug/L			09/28/24 06:33	40

Client: Waste Management
Project/Site: ChemTrol Site - Groundwater

Job ID: 480-223722-1

Client Sample ID: MW-13R
Date Collected: 09/25/24 10:20
Date Received: 09/25/24 15:22

Lab Sample ID: 480-223722-3
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	107		77 - 120		09/28/24 06:33	40
Toluene-d8 (Surr)	101		80 - 120		09/28/24 06:33	40
4-Bromofluorobenzene (Surr)	92		73 - 120		09/28/24 06:33	40
Dibromofluoromethane (Surr)	103		75 - 123		09/28/24 06:33	40

Client: Waste Management
Project/Site: ChemTrol Site - Groundwater

Job ID: 480-223722-1

Client Sample ID: MW-15R

Date Collected: 09/25/24 09:25
Date Received: 09/25/24 15:22

Lab Sample ID: 480-223722-4

Matrix: Water

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0		ug/L			09/28/24 06:55	2
1,1,2,2-Tetrachloroethane	ND		5.0		ug/L			09/28/24 06:55	2
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0		ug/L			09/28/24 06:55	2
1,1,2-Trichloroethane	ND		5.0		ug/L			09/28/24 06:55	2
1,1-Dichloroethane	ND		5.0		ug/L			09/28/24 06:55	2
1,2,4-Trichlorobenzene	ND		5.0		ug/L			09/28/24 06:55	2
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			09/28/24 06:55	2
1,2-Dibromoethane	ND		5.0		ug/L			09/28/24 06:55	2
1,2-Dichlorobenzene	ND		5.0		ug/L			09/28/24 06:55	2
1,2-Dichloroethane	ND		5.0		ug/L			09/28/24 06:55	2
1,2-Dichloropropane	ND		5.0		ug/L			09/28/24 06:55	2
1,3-Dichlorobenzene	ND		5.0		ug/L			09/28/24 06:55	2
1,4-Dichlorobenzene	ND		5.0		ug/L			09/28/24 06:55	2
2-Butanone (MEK)	ND		25		ug/L			09/28/24 06:55	2
o-Chlorotoluene	ND		5.0		ug/L			09/28/24 06:55	2
2-Hexanone	ND		25		ug/L			09/28/24 06:55	2
4-Methyl-2-pentanone (MIBK)	ND		25		ug/L			09/28/24 06:55	2
Acetone	ND		25		ug/L			09/28/24 06:55	2
Benzene	ND		5.0		ug/L			09/28/24 06:55	2
Bromoform	ND		5.0		ug/L			09/28/24 06:55	2
Bromomethane	ND		5.0		ug/L			09/28/24 06:55	2
Carbon disulfide	ND		5.0		ug/L			09/28/24 06:55	2
Carbon tetrachloride	ND		5.0		ug/L			09/28/24 06:55	2
Chlorobenzene	ND		5.0		ug/L			09/28/24 06:55	2
Chlorodibromomethane	ND		5.0		ug/L			09/28/24 06:55	2
Chloroethane	ND		5.0		ug/L			09/28/24 06:55	2
Chloroform	ND		5.0		ug/L			09/28/24 06:55	2
Chloromethane	ND		5.0		ug/L			09/28/24 06:55	2
cis-1,2-Dichloroethene	ND		5.0		ug/L			09/28/24 06:55	2
cis-1,3-Dichloropropene	ND		5.0		ug/L			09/28/24 06:55	2
Cyclohexane	**31**		5.0		ug/L			09/28/24 06:55	2
Bromodichloromethane	ND		5.0		ug/L			09/28/24 06:55	2
Dichlorofluoromethane	ND		5.0		ug/L			09/28/24 06:55	2
Ethylbenzene	ND		5.0		ug/L			09/28/24 06:55	2
Isopropylbenzene	ND		5.0		ug/L			09/28/24 06:55	2
Methyl acetate	ND		5.0		ug/L			09/28/24 06:55	2
Methyl tert-butyl ether	ND		5.0		ug/L			09/28/24 06:55	2
Methylcyclohexane	**8.8**		5.0		ug/L			09/28/24 06:55	2
Methylene Chloride	ND		5.0		ug/L			09/28/24 06:55	2
Styrene	ND		5.0		ug/L			09/28/24 06:55	2
Tetrachloroethene	ND		5.0		ug/L			09/28/24 06:55	2
Toluene	ND		5.0		ug/L			09/28/24 06:55	2
trans-1,2-Dichloroethene	ND		5.0		ug/L			09/28/24 06:55	2
trans-1,3-Dichloropropene	ND		5.0		ug/L			09/28/24 06:55	2
Trichloroethene	ND		5.0		ug/L			09/28/24 06:55	2
Trichlorofluoromethane	ND		5.0		ug/L			09/28/24 06:55	2
Vinyl chloride	ND		5.0		ug/L			09/28/24 06:55	2
Xylenes, Total	ND		15		ug/L			09/28/24 06:55	2

Client Sample Results

Client: Waste Management
Project/Site: ChemTrol Site - Groundwater

Job ID: 480-223722-1

Client Sample ID: MW-15R

Date Collected: 09/25/24 09:25
Date Received: 09/25/24 15:22

Lab Sample ID: 480-223722-4

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		77 - 120		09/28/24 06:55	2
Toluene-d8 (Surr)	101		80 - 120		09/28/24 06:55	2
4-Bromofluorobenzene (Surr)	96		73 - 120		09/28/24 06:55	2
Dibromofluoromethane (Surr)	101		75 - 123		09/28/24 06:55	2

Client Sample ID: MW-3S
Date Collected: 09/25/24 12:15
Date Received: 09/25/24 15:22

Lab Sample ID: 480-223722-5
Matrix: Water

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		820		ug/L			09/28/24 07:18	1000
1,1,2,2-Tetrachloroethane	ND		210		ug/L			09/28/24 07:18	1000
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		310		ug/L			09/28/24 07:18	1000
1,1,2-Trichloroethane	ND		230		ug/L			09/28/24 07:18	1000
1,1-Dichloroethane	ND		380		ug/L			09/28/24 07:18	1000
1,2,4-Trichlorobenzene	ND		410		ug/L			09/28/24 07:18	1000
1,2-Dibromo-3-Chloropropane	ND		390		ug/L			09/28/24 07:18	1000
1,2-Dibromoethane	ND		730		ug/L			09/28/24 07:18	1000
1,2-Dichlorobenzene	ND		790		ug/L			09/28/24 07:18	1000
1,2-Dichloroethane	ND		210		ug/L			09/28/24 07:18	1000
1,2-Dichloropropane	ND		720		ug/L			09/28/24 07:18	1000
1,3-Dichlorobenzene	ND		780		ug/L			09/28/24 07:18	1000
1,4-Dichlorobenzene	ND		840		ug/L			09/28/24 07:18	1000
2-Butanone (MEK)	ND		1300		ug/L			09/28/24 07:18	1000
o-Chlorotoluene	**77000**		860		ug/L			09/28/24 07:18	1000
2-Hexanone	ND		1200		ug/L			09/28/24 07:18	1000
4-Methyl-2-pentanone (MIBK)	ND		2100		ug/L			09/28/24 07:18	1000
Acetone	ND		3000		ug/L			09/28/24 07:18	1000
Benzene	ND		410		ug/L			09/28/24 07:18	1000
Bromoform	ND		260		ug/L			09/28/24 07:18	1000
Bromomethane	ND		690		ug/L			09/28/24 07:18	1000
Carbon disulfide	ND		190		ug/L			09/28/24 07:18	1000
Carbon tetrachloride	ND		270		ug/L			09/28/24 07:18	1000
Chlorobenzene	ND		750		ug/L			09/28/24 07:18	1000
Chlorodibromomethane	ND		320		ug/L			09/28/24 07:18	1000
Chloroethane	ND		320		ug/L			09/28/24 07:18	1000
Chloroform	ND		340		ug/L			09/28/24 07:18	1000
Chloromethane	ND		350		ug/L			09/28/24 07:18	1000
cis-1,2-Dichloroethene	ND		810		ug/L			09/28/24 07:18	1000
cis-1,3-Dichloropropene	ND		360		ug/L			09/28/24 07:18	1000
Cyclohexane	ND		180		ug/L			09/28/24 07:18	1000
Bromodichloromethane	ND		390		ug/L			09/28/24 07:18	1000
Dichlorofluoromethane	ND		340		ug/L			09/28/24 07:18	1000
Ethylbenzene	ND		740		ug/L			09/28/24 07:18	1000
Isopropylbenzene	ND		790		ug/L			09/28/24 07:18	1000
Methyl acetate	ND		1300		ug/L			09/28/24 07:18	1000
Methyl tert-butyl ether	ND		160		ug/L			09/28/24 07:18	1000
Methylcyclohexane	ND		160		ug/L			09/28/24 07:18	1000
Methylene Chloride	ND		440		ug/L			09/28/24 07:18	1000
Styrene	ND		730		ug/L			09/28/24 07:18	1000
Tetrachloroethene	ND		360		ug/L			09/28/24 07:18	1000
Toluene	ND		510		ug/L			09/28/24 07:18	1000
trans-1,2-Dichloroethene	ND		900		ug/L			09/28/24 07:18	1000
trans-1,3-Dichloropropene	ND		370		ug/L			09/28/24 07:18	1000
Trichloroethene	ND		460		ug/L			09/28/24 07:18	1000
Trichlorofluoromethane	ND		880		ug/L			09/28/24 07:18	1000
Vinyl chloride	ND		900		ug/L			09/28/24 07:18	1000
Xylenes, Total	ND		660		ug/L			09/28/24 07:18	1000

Client: Waste Management
Project/Site: ChemTrol Site - Groundwater

Job ID: 480-223722-1

Client Sample ID: MW-3S
Date Collected: 09/25/24 12:15
Date Received: 09/25/24 15:22

Lab Sample ID: 480-223722-5
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		77 - 120		09/28/24 07:18	1000
Toluene-d8 (Surr)	101		80 - 120		09/28/24 07:18	1000
4-Bromofluorobenzene (Surr)	95		73 - 120		09/28/24 07:18	1000
Dibromofluoromethane (Surr)	102		75 - 123		09/28/24 07:18	1000

Client: Waste Management
Project/Site: ChemTrol Site - Groundwater

Job ID: 480-223722-1

Client Sample ID: MW-7R
Date Collected: 09/25/24 08:20
Date Received: 09/25/24 15:22

Lab Sample ID: 480-223722-6
Matrix: Water

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0		ug/L			09/28/24 07:41	1
1,1,2,2-Tetrachloroethane	ND		5.0		ug/L			09/28/24 07:41	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0		ug/L			09/28/24 07:41	1
1,1,2-Trichloroethane	ND		5.0		ug/L			09/28/24 07:41	1
1,1-Dichloroethane	ND		5.0		ug/L			09/28/24 07:41	1
1,2,4-Trichlorobenzene	ND		5.0		ug/L			09/28/24 07:41	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			09/28/24 07:41	1
1,2-Dibromoethane	ND		5.0		ug/L			09/28/24 07:41	1
1,2-Dichlorobenzene	ND		5.0		ug/L			09/28/24 07:41	1
1,2-Dichloroethane	ND		5.0		ug/L			09/28/24 07:41	1
1,2-Dichloropropane	ND		5.0		ug/L			09/28/24 07:41	1
1,3-Dichlorobenzene	ND		5.0		ug/L			09/28/24 07:41	1
1,4-Dichlorobenzene	ND		5.0		ug/L			09/28/24 07:41	1
2-Butanone (MEK)	ND		25		ug/L			09/28/24 07:41	1
o-Chlorotoluene	ND		5.0		ug/L			09/28/24 07:41	1
2-Hexanone	ND		25		ug/L			09/28/24 07:41	1
4-Methyl-2-pentanone (MIBK)	ND		25		ug/L			09/28/24 07:41	1
Acetone	ND		25		ug/L			09/28/24 07:41	1
Benzene	ND		5.0		ug/L			09/28/24 07:41	1
Bromoform	ND		5.0		ug/L			09/28/24 07:41	1
Bromomethane	ND		5.0		ug/L			09/28/24 07:41	1
Carbon disulfide	ND		5.0		ug/L			09/28/24 07:41	1
Carbon tetrachloride	ND		5.0		ug/L			09/28/24 07:41	1
Chlorobenzene	ND		5.0		ug/L			09/28/24 07:41	1
Chlorodibromomethane	ND		5.0		ug/L			09/28/24 07:41	1
Chloroethane	ND		5.0		ug/L			09/28/24 07:41	1
Chloroform	ND		5.0		ug/L			09/28/24 07:41	1
Chloromethane	ND		5.0		ug/L			09/28/24 07:41	1
cis-1,2-Dichloroethene	ND		5.0		ug/L			09/28/24 07:41	1
cis-1,3-Dichloropropene	ND		5.0		ug/L			09/28/24 07:41	1
Cyclohexane	ND		5.0		ug/L			09/28/24 07:41	1
Bromodichloromethane	ND		5.0		ug/L			09/28/24 07:41	1
Dichlorofluoromethane	ND		5.0		ug/L			09/28/24 07:41	1
Ethylbenzene	ND		5.0		ug/L			09/28/24 07:41	1
Isopropylbenzene	ND		5.0		ug/L			09/28/24 07:41	1
Methyl acetate	ND		5.0		ug/L			09/28/24 07:41	1
Methyl tert-butyl ether	ND		5.0		ug/L			09/28/24 07:41	1
Methylcyclohexane	ND		5.0		ug/L			09/28/24 07:41	1
Methylene Chloride	ND		5.0		ug/L			09/28/24 07:41	1
Styrene	ND		5.0		ug/L			09/28/24 07:41	1
Tetrachloroethene	ND		5.0		ug/L			09/28/24 07:41	1
Toluene	ND		5.0		ug/L			09/28/24 07:41	1
trans-1,2-Dichloroethene	ND		5.0		ug/L			09/28/24 07:41	1
trans-1,3-Dichloropropene	ND		5.0		ug/L			09/28/24 07:41	1
Trichloroethene	ND		5.0		ug/L			09/28/24 07:41	1
Trichlorofluoromethane	ND		5.0		ug/L			09/28/24 07:41	1
Vinyl chloride	ND		5.0		ug/L			09/28/24 07:41	1
Xylenes, Total	ND		15		ug/L			09/28/24 07:41	1

Client: Waste Management
Project/Site: ChemTrol Site - Groundwater

Job ID: 480-223722-1

Client Sample ID: MW-7R
Date Collected: 09/25/24 08:20
Date Received: 09/25/24 15:22

Lab Sample ID: 480-223722-6
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		77 - 120		09/28/24 07:41	1
Toluene-d8 (Surr)	100		80 - 120		09/28/24 07:41	1
4-Bromofluorobenzene (Surr)	95		73 - 120		09/28/24 07:41	1
Dibromofluoromethane (Surr)	103		75 - 123		09/28/24 07:41	1

Client: Waste Management
Project/Site: ChemTrol Site - Groundwater

Job ID: 480-223722-1

Client Sample ID: MW-8R
Date Collected: 09/25/24 11:15
Date Received: 09/25/24 15:22

Lab Sample ID: 480-223722-7
Matrix: Water

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0		ug/L			09/28/24 08:03	4
1,1,2,2-Tetrachloroethane	ND		5.0		ug/L			09/28/24 08:03	4
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0		ug/L			09/28/24 08:03	4
1,1,2-Trichloroethane	ND		5.0		ug/L			09/28/24 08:03	4
1,1-Dichloroethane	ND		5.0		ug/L			09/28/24 08:03	4
1,2,4-Trichlorobenzene	ND		5.0		ug/L			09/28/24 08:03	4
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			09/28/24 08:03	4
1,2-Dibromoethane	ND		5.0		ug/L			09/28/24 08:03	4
1,2-Dichlorobenzene	ND		5.0		ug/L			09/28/24 08:03	4
1,2-Dichloroethane	ND		5.0		ug/L			09/28/24 08:03	4
1,2-Dichloropropane	ND		5.0		ug/L			09/28/24 08:03	4
1,3-Dichlorobenzene	ND		5.0		ug/L			09/28/24 08:03	4
1,4-Dichlorobenzene	ND		5.0		ug/L			09/28/24 08:03	4
2-Butanone (MEK)	ND		25		ug/L			09/28/24 08:03	4
o-Chlorotoluene	**100**		5.0		ug/L			09/28/24 08:03	4
2-Hexanone	ND		25		ug/L			09/28/24 08:03	4
4-Methyl-2-pentanone (MIBK)	ND		25		ug/L			09/28/24 08:03	4
Acetone	ND		25		ug/L			09/28/24 08:03	4
Benzene	ND		5.0		ug/L			09/28/24 08:03	4
Bromoform	ND		5.0		ug/L			09/28/24 08:03	4
Bromomethane	ND		5.0		ug/L			09/28/24 08:03	4
Carbon disulfide	ND		5.0		ug/L			09/28/24 08:03	4
Carbon tetrachloride	ND		5.0		ug/L			09/28/24 08:03	4
Chlorobenzene	ND		5.0		ug/L			09/28/24 08:03	4
Chlorodibromomethane	ND		5.0		ug/L			09/28/24 08:03	4
Chloroethane	ND		5.0		ug/L			09/28/24 08:03	4
Chloroform	ND		5.0		ug/L			09/28/24 08:03	4
Chloromethane	ND		5.0		ug/L			09/28/24 08:03	4
cis-1,2-Dichloroethene	ND		5.0		ug/L			09/28/24 08:03	4
cis-1,3-Dichloropropene	ND		5.0		ug/L			09/28/24 08:03	4
Cyclohexane	ND		5.0		ug/L			09/28/24 08:03	4
Bromodichloromethane	ND		5.0		ug/L			09/28/24 08:03	4
Dichlorofluoromethane	ND		5.0		ug/L			09/28/24 08:03	4
Ethylbenzene	ND		5.0		ug/L			09/28/24 08:03	4
Isopropylbenzene	ND		5.0		ug/L			09/28/24 08:03	4
Methyl acetate	ND		5.2		ug/L			09/28/24 08:03	4
Methyl tert-butyl ether	ND		5.0		ug/L			09/28/24 08:03	4
Methylcyclohexane	ND		5.0		ug/L			09/28/24 08:03	4
Methylene Chloride	ND		5.0		ug/L			09/28/24 08:03	4
Styrene	ND		5.0		ug/L			09/28/24 08:03	4
Tetrachloroethene	ND		5.0		ug/L			09/28/24 08:03	4
Toluene	ND		5.0		ug/L			09/28/24 08:03	4
trans-1,2-Dichloroethene	ND		5.0		ug/L			09/28/24 08:03	4
trans-1,3-Dichloropropene	ND		5.0		ug/L			09/28/24 08:03	4
Trichloroethene	ND		5.0		ug/L			09/28/24 08:03	4
Trichlorofluoromethane	ND		5.0		ug/L			09/28/24 08:03	4
Vinyl chloride	ND		5.0		ug/L			09/28/24 08:03	4
Xylenes, Total	ND		15		ug/L			09/28/24 08:03	4

Client Sample Results

Client: Waste Management
Project/Site: ChemTrol Site - Groundwater

Job ID: 480-223722-1

Client Sample ID: MW-8R

Date Collected: 09/25/24 11:15
Date Received: 09/25/24 15:22

Lab Sample ID: 480-223722-7

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		77 - 120		09/28/24 08:03	4
Toluene-d8 (Surr)	103		80 - 120		09/28/24 08:03	4
4-Bromofluorobenzene (Surr)	93		73 - 120		09/28/24 08:03	4
Dibromofluoromethane (Surr)	103		75 - 123		09/28/24 08:03	4

Client: Waste Management
Project/Site: ChemTrol Site - Groundwater

Job ID: 480-223722-1

Client Sample ID: MW-9R
Date Collected: 09/25/24 13:20
Date Received: 09/25/24 15:22

Lab Sample ID: 480-223722-8
Matrix: Water

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**160**		5.0		ug/L			09/28/24 08:26	4
1,1,2,2-Tetrachloroethane	ND		5.0		ug/L			09/28/24 08:26	4
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0		ug/L			09/28/24 08:26	4
1,1,2-Trichloroethane	ND		5.0		ug/L			09/28/24 08:26	4
1,1-Dichloroethane	**71**		5.0		ug/L			09/28/24 08:26	4
1,2,4-Trichlorobenzene	ND		5.0		ug/L			09/28/24 08:26	4
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			09/28/24 08:26	4
1,2-Dibromoethane	ND		5.0		ug/L			09/28/24 08:26	4
1,2-Dichlorobenzene	ND		5.0		ug/L			09/28/24 08:26	4
1,2-Dichloroethane	ND		5.0		ug/L			09/28/24 08:26	4
1,2-Dichloropropane	ND		5.0		ug/L			09/28/24 08:26	4
1,3-Dichlorobenzene	ND		5.0		ug/L			09/28/24 08:26	4
1,4-Dichlorobenzene	ND		5.0		ug/L			09/28/24 08:26	4
2-Butanone (MEK)	ND		25		ug/L			09/28/24 08:26	4
o-Chlorotoluene	ND		5.0		ug/L			09/28/24 08:26	4
2-Hexanone	ND		25		ug/L			09/28/24 08:26	4
4-Methyl-2-pentanone (MIBK)	ND		25		ug/L			09/28/24 08:26	4
Acetone	ND		25		ug/L			09/28/24 08:26	4
Benzene	ND		5.0		ug/L			09/28/24 08:26	4
Bromoform	ND		5.0		ug/L			09/28/24 08:26	4
Bromomethane	ND		5.0		ug/L			09/28/24 08:26	4
Carbon disulfide	ND		5.0		ug/L			09/28/24 08:26	4
Carbon tetrachloride	ND		5.0		ug/L			09/28/24 08:26	4
Chlorobenzene	ND		5.0		ug/L			09/28/24 08:26	4
Chlorodibromomethane	ND		5.0		ug/L			09/28/24 08:26	4
Chloroethane	ND		5.0		ug/L			09/28/24 08:26	4
Chloroform	ND		5.0		ug/L			09/28/24 08:26	4
Chloromethane	ND		5.0		ug/L			09/28/24 08:26	4
cis-1,2-Dichloroethene	ND		5.0		ug/L			09/28/24 08:26	4
cis-1,3-Dichloropropene	ND		5.0		ug/L			09/28/24 08:26	4
Cyclohexane	ND		5.0		ug/L			09/28/24 08:26	4
Bromodichloromethane	ND		5.0		ug/L			09/28/24 08:26	4
Dichlorofluoromethane	ND		5.0		ug/L			09/28/24 08:26	4
Ethylbenzene	ND		5.0		ug/L			09/28/24 08:26	4
Isopropylbenzene	ND		5.0		ug/L			09/28/24 08:26	4
Methyl acetate	ND		5.2		ug/L			09/28/24 08:26	4
Methyl tert-butyl ether	ND		5.0		ug/L			09/28/24 08:26	4
Methylcyclohexane	ND		5.0		ug/L			09/28/24 08:26	4
Methylene Chloride	ND		5.0		ug/L			09/28/24 08:26	4
Styrene	ND		5.0		ug/L			09/28/24 08:26	4
Tetrachloroethene	ND		5.0		ug/L			09/28/24 08:26	4
Toluene	ND		5.0		ug/L			09/28/24 08:26	4
trans-1,2-Dichloroethene	ND		5.0		ug/L			09/28/24 08:26	4
trans-1,3-Dichloropropene	ND		5.0		ug/L			09/28/24 08:26	4
Trichloroethene	ND		5.0		ug/L			09/28/24 08:26	4
Trichlorofluoromethane	ND		5.0		ug/L			09/28/24 08:26	4
Vinyl chloride	ND		5.0		ug/L			09/28/24 08:26	4
Xylenes, Total	ND		15		ug/L			09/28/24 08:26	4

Client: Waste Management
Project/Site: ChemTrol Site - Groundwater

Job ID: 480-223722-1

Client Sample ID: MW-9R
Date Collected: 09/25/24 13:20
Date Received: 09/25/24 15:22

Lab Sample ID: 480-223722-8
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	108		77 - 120		09/28/24 08:26	4
Toluene-d8 (Surr)	99		80 - 120		09/28/24 08:26	4
4-Bromofluorobenzene (Surr)	93		73 - 120		09/28/24 08:26	4
Dibromofluoromethane (Surr)	107		75 - 123		09/28/24 08:26	4

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 480-726431/8
Matrix: Water
Analysis Batch: 726431

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0		ug/L			09/28/24 00:55	1
1,1,2,2-Tetrachloroethane	ND		5.0		ug/L			09/28/24 00:55	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0		ug/L			09/28/24 00:55	1
1,1,2-Trichloroethane	ND		5.0		ug/L			09/28/24 00:55	1
1,1-Dichloroethane	ND		5.0		ug/L			09/28/24 00:55	1
1,2,4-Trichlorobenzene	ND		5.0		ug/L			09/28/24 00:55	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			09/28/24 00:55	1
1,2-Dibromoethane	ND		5.0		ug/L			09/28/24 00:55	1
1,2-Dichlorobenzene	ND		5.0		ug/L			09/28/24 00:55	1
1,2-Dichloroethane	ND		5.0		ug/L			09/28/24 00:55	1
1,2-Dichloropropane	ND		5.0		ug/L			09/28/24 00:55	1
1,3-Dichlorobenzene	ND		5.0		ug/L			09/28/24 00:55	1
1,4-Dichlorobenzene	ND		5.0		ug/L			09/28/24 00:55	1
2-Butanone (MEK)	ND		25		ug/L			09/28/24 00:55	1
o-Chlorotoluene	ND		5.0		ug/L			09/28/24 00:55	1
2-Hexanone	ND		25		ug/L			09/28/24 00:55	1
4-Methyl-2-pentanone (MIBK)	ND		25		ug/L			09/28/24 00:55	1
Acetone	ND		25		ug/L			09/28/24 00:55	1
Benzene	ND		5.0		ug/L			09/28/24 00:55	1
Bromoform	ND		5.0		ug/L			09/28/24 00:55	1
Bromomethane	ND		5.0		ug/L			09/28/24 00:55	1
Carbon disulfide	ND		5.0		ug/L			09/28/24 00:55	1
Carbon tetrachloride	ND		5.0		ug/L			09/28/24 00:55	1
Chlorobenzene	ND		5.0		ug/L			09/28/24 00:55	1
Chlorodibromomethane	ND		5.0		ug/L			09/28/24 00:55	1
Chloroethane	ND		5.0		ug/L			09/28/24 00:55	1
Chloroform	ND		5.0		ug/L			09/28/24 00:55	1
Chloromethane	ND		5.0		ug/L			09/28/24 00:55	1
cis-1,2-Dichloroethene	ND		5.0		ug/L			09/28/24 00:55	1
cis-1,3-Dichloropropene	ND		5.0		ug/L			09/28/24 00:55	1
Cyclohexane	ND		5.0		ug/L			09/28/24 00:55	1
Bromodichloromethane	ND		5.0		ug/L			09/28/24 00:55	1
Dichlorofluoromethane	ND		5.0		ug/L			09/28/24 00:55	1
Ethylbenzene	ND		5.0		ug/L			09/28/24 00:55	1
Isopropylbenzene	ND		5.0		ug/L			09/28/24 00:55	1
Methyl acetate	ND		5.0		ug/L			09/28/24 00:55	1
Methyl tert-butyl ether	ND		5.0		ug/L			09/28/24 00:55	1
Methylcyclohexane	ND		5.0		ug/L			09/28/24 00:55	1
Methylene Chloride	ND		5.0		ug/L			09/28/24 00:55	1
Styrene	ND		5.0		ug/L			09/28/24 00:55	1
Tetrachloroethene	ND		5.0		ug/L			09/28/24 00:55	1
Toluene	ND		5.0		ug/L			09/28/24 00:55	1
trans-1,2-Dichloroethene	ND		5.0		ug/L			09/28/24 00:55	1
trans-1,3-Dichloropropene	ND		5.0		ug/L			09/28/24 00:55	1
Trichloroethene	ND		5.0		ug/L			09/28/24 00:55	1
Trichlorofluoromethane	ND		5.0		ug/L			09/28/24 00:55	1
Vinyl chloride	ND		5.0		ug/L			09/28/24 00:55	1
Xylenes, Total	ND		15		ug/L			09/28/24 00:55	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 480-726431/8
Matrix: Water
Analysis Batch: 726431

Client Sample ID: Method Blank
Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		77 - 120		09/28/24 00:55	1
Toluene-d8 (Surr)	101		80 - 120		09/28/24 00:55	1
4-Bromofluorobenzene (Surr)	94		73 - 120		09/28/24 00:55	1
Dibromofluoromethane (Surr)	101		75 - 123		09/28/24 00:55	1

Lab Sample ID: LCS 480-726431/6
Matrix: Water
Analysis Batch: 726431

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1-Trichloroethane	25.0	25.5		ug/L		102	73 - 126
1,1,2,2-Tetrachloroethane	25.0	24.4		ug/L		98	76 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	28.1		ug/L		112	61 - 148
1,1,2-Trichloroethane	25.0	26.0		ug/L		104	76 - 122
1,1-Dichloroethane	25.0	28.4		ug/L		114	77 - 120
1,2,4-Trichlorobenzene	25.0	23.8		ug/L		95	79 - 122
1,2-Dibromo-3-Chloropropane	25.0	28.0		ug/L		112	56 - 134
1,2-Dibromoethane	25.0	24.9		ug/L		99	77 - 120
1,2-Dichlorobenzene	25.0	24.5		ug/L		98	80 - 124
1,2-Dichloroethane	25.0	25.3		ug/L		101	75 - 120
1,2-Dichloropropane	25.0	28.0		ug/L		112	76 - 120
1,3-Dichlorobenzene	25.0	25.2		ug/L		101	77 - 120
1,4-Dichlorobenzene	25.0	24.6		ug/L		98	80 - 120
2-Butanone (MEK)	125	137		ug/L		109	57 - 140
o-Chlorotoluene	25.0	25.8		ug/L		103	76 - 121
2-Hexanone	125	147		ug/L		118	65 - 127
4-Methyl-2-pentanone (MIBK)	125	144		ug/L		115	71 - 125
Acetone	125	146		ug/L		117	56 - 142
Benzene	25.0	27.2		ug/L		109	71 - 124
Bromoform	25.0	28.6		ug/L		114	61 - 132
Bromomethane	25.0	27.2		ug/L		109	55 - 144
Carbon disulfide	25.0	28.7		ug/L		115	59 - 134
Carbon tetrachloride	25.0	27.9		ug/L		112	72 - 134
Chlorobenzene	25.0	26.5		ug/L		106	80 - 120
Chlorodibromomethane	25.0	27.2		ug/L		109	75 - 125
Chloroethane	25.0	33.1		ug/L		132	69 - 136
Chloroform	25.0	24.5		ug/L		98	73 - 127
Chloromethane	25.0	28.8		ug/L		115	68 - 124
cis-1,2-Dichloroethene	25.0	25.5		ug/L		102	74 - 124
cis-1,3-Dichloropropene	25.0	24.6		ug/L		99	74 - 124
Cyclohexane	25.0	28.2		ug/L		113	59 - 135
Bromodichloromethane	25.0	26.1		ug/L		104	80 - 122
Dichlorofluoromethane	25.0	30.4		ug/L		122	76 - 127
Ethylbenzene	25.0	28.4		ug/L		114	77 - 123
Isopropylbenzene	25.0	27.0		ug/L		108	77 - 122
Methyl acetate	50.0	59.5		ug/L		119	74 - 133
Methyl tert-butyl ether	25.0	24.4		ug/L		98	77 - 120
Methylcyclohexane	25.0	25.2		ug/L		101	68 - 134

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 480-726431/6
Matrix: Water
Analysis Batch: 726431

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Methylene Chloride	25.0	25.1		ug/L		100	75 - 124
Styrene	25.0	26.4		ug/L		105	80 - 120
Tetrachloroethene	25.0	27.8		ug/L		111	74 - 122
Toluene	25.0	28.2		ug/L		113	80 - 122
trans-1,2-Dichloroethene	25.0	27.7		ug/L		111	73 - 127
trans-1,3-Dichloropropene	25.0	25.1		ug/L		100	80 - 120
Trichloroethene	25.0	27.1		ug/L		108	74 - 123
Trichlorofluoromethane	25.0	31.6		ug/L		126	62 - 150
Vinyl chloride	25.0	30.0		ug/L		120	65 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*93*		*77 - 120*
Toluene-d8 (Surr)	*103*		*80 - 120*
4-Bromofluorobenzene (Surr)	*97*		*73 - 120*
Dibromofluoromethane (Surr)	*96*		*75 - 123*

Lab Sample ID: MB 480-726582/9
Matrix: Water
Analysis Batch: 726582

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0		ug/L			09/30/24 13:34	1
1,1,2,2-Tetrachloroethane	ND		5.0		ug/L			09/30/24 13:34	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0		ug/L			09/30/24 13:34	1
1,1,2-Trichloroethane	ND		5.0		ug/L			09/30/24 13:34	1
1,1-Dichloroethane	ND		5.0		ug/L			09/30/24 13:34	1
1,2,4-Trichlorobenzene	ND		5.0		ug/L			09/30/24 13:34	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			09/30/24 13:34	1
1,2-Dibromoethane	ND		5.0		ug/L			09/30/24 13:34	1
1,2-Dichlorobenzene	ND		5.0		ug/L			09/30/24 13:34	1
1,2-Dichloroethane	ND		5.0		ug/L			09/30/24 13:34	1
1,2-Dichloropropane	ND		5.0		ug/L			09/30/24 13:34	1
1,3-Dichlorobenzene	ND		5.0		ug/L			09/30/24 13:34	1
1,4-Dichlorobenzene	ND		5.0		ug/L			09/30/24 13:34	1
2-Butanone (MEK)	ND		25		ug/L			09/30/24 13:34	1
o-Chlorotoluene	ND		5.0		ug/L			09/30/24 13:34	1
2-Hexanone	ND		25		ug/L			09/30/24 13:34	1
4-Methyl-2-pentanone (MIBK)	ND		25		ug/L			09/30/24 13:34	1
Acetone	ND		25		ug/L			09/30/24 13:34	1
Benzene	ND		5.0		ug/L			09/30/24 13:34	1
Bromoform	ND		5.0		ug/L			09/30/24 13:34	1
Bromomethane	ND		5.0		ug/L			09/30/24 13:34	1
Carbon disulfide	ND		5.0		ug/L			09/30/24 13:34	1
Carbon tetrachloride	ND		5.0		ug/L			09/30/24 13:34	1
Chlorobenzene	ND		5.0		ug/L			09/30/24 13:34	1
Chlorodibromomethane	ND		5.0		ug/L			09/30/24 13:34	1
Chloroethane	ND		5.0		ug/L			09/30/24 13:34	1
Chloroform	ND		5.0		ug/L			09/30/24 13:34	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 480-726582/9
Matrix: Water
Analysis Batch: 726582

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	ND		5.0		ug/L			09/30/24 13:34	1
cis-1,2-Dichloroethene	ND		5.0		ug/L			09/30/24 13:34	1
cis-1,3-Dichloropropene	ND		5.0		ug/L			09/30/24 13:34	1
Cyclohexane	ND		5.0		ug/L			09/30/24 13:34	1
Bromodichloromethane	ND		5.0		ug/L			09/30/24 13:34	1
Dichlorofluoromethane	ND		5.0		ug/L			09/30/24 13:34	1
Ethylbenzene	ND		5.0		ug/L			09/30/24 13:34	1
Isopropylbenzene	ND		5.0		ug/L			09/30/24 13:34	1
Methyl acetate	ND		5.0		ug/L			09/30/24 13:34	1
Methyl tert-butyl ether	ND		5.0		ug/L			09/30/24 13:34	1
Methylcyclohexane	ND		5.0		ug/L			09/30/24 13:34	1
Methylene Chloride	ND		5.0		ug/L			09/30/24 13:34	1
Styrene	ND		5.0		ug/L			09/30/24 13:34	1
Tetrachloroethene	ND		5.0		ug/L			09/30/24 13:34	1
Toluene	ND		5.0		ug/L			09/30/24 13:34	1
trans-1,2-Dichloroethene	ND		5.0		ug/L			09/30/24 13:34	1
trans-1,3-Dichloropropene	ND		5.0		ug/L			09/30/24 13:34	1
Trichloroethene	ND		5.0		ug/L			09/30/24 13:34	1
Trichlorofluoromethane	ND		5.0		ug/L			09/30/24 13:34	1
Vinyl chloride	ND		5.0		ug/L			09/30/24 13:34	1
Xylenes, Total	ND		15		ug/L			09/30/24 13:34	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*77 - 120*		*09/30/24 13:34*	*1*
Toluene-d8 (Surr)	*103*		*80 - 120*		*09/30/24 13:34*	*1*
4-Bromofluorobenzene (Surr)	*108*		*73 - 120*		*09/30/24 13:34*	*1*
Dibromofluoromethane (Surr)	*103*		*75 - 123*		*09/30/24 13:34*	*1*

Lab Sample ID: LCS 480-726582/6
Matrix: Water
Analysis Batch: 726582

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1-Trichloroethane	25.0	23.5		ug/L		94	73 - 126
1,1,2,2-Tetrachloroethane	25.0	25.8		ug/L		103	76 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	26.2		ug/L		105	61 - 148
1,1,2-Trichloroethane	25.0	26.0		ug/L		104	76 - 122
1,1-Dichloroethane	25.0	25.0		ug/L		100	77 - 120
1,2,4-Trichlorobenzene	25.0	26.5		ug/L		106	79 - 122
1,2-Dibromo-3-Chloropropane	25.0	23.9		ug/L		96	56 - 134
1,2-Dibromoethane	25.0	26.2		ug/L		105	77 - 120
1,2-Dichlorobenzene	25.0	25.1		ug/L		100	80 - 124
1,2-Dichloroethane	25.0	24.7		ug/L		99	75 - 120
1,2-Dichloropropane	25.0	25.2		ug/L		101	76 - 120
1,3-Dichlorobenzene	25.0	24.8		ug/L		99	77 - 120
1,4-Dichlorobenzene	25.0	24.6		ug/L		98	80 - 120
2-Butanone (MEK)	125	205	*+	ug/L		164	57 - 140
o-Chlorotoluene	25.0	25.4		ug/L		102	76 - 121

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 480-726582/6
Matrix: Water
Analysis Batch: 726582

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2-Hexanone	125	124		ug/L		99	65 - 127
4-Methyl-2-pentanone (MIBK)	125	122		ug/L		98	71 - 125
Acetone	125	116		ug/L		92	56 - 142
Benzene	25.0	25.0		ug/L		100	71 - 124
Bromoform	25.0	28.8		ug/L		115	61 - 132
Bromomethane	25.0	22.0		ug/L		88	55 - 144
Carbon disulfide	25.0	24.1		ug/L		97	59 - 134
Carbon tetrachloride	25.0	24.8		ug/L		99	72 - 134
Chlorobenzene	25.0	24.9		ug/L		99	80 - 120
Chlorodibromomethane	25.0	27.2		ug/L		109	75 - 125
Chloroethane	25.0	22.5		ug/L		90	69 - 136
Chloroform	25.0	24.5		ug/L		98	73 - 127
Chloromethane	25.0	21.4		ug/L		86	68 - 124
cis-1,2-Dichloroethene	25.0	24.9		ug/L		100	74 - 124
cis-1,3-Dichloropropene	25.0	25.9		ug/L		104	74 - 124
Cyclohexane	25.0	23.4		ug/L		94	59 - 135
Bromodichloromethane	25.0	25.7		ug/L		103	80 - 122
Dichlorofluoromethane	25.0	24.3		ug/L		97	76 - 127
Ethylbenzene	25.0	25.3		ug/L		101	77 - 123
Isopropylbenzene	25.0	24.4		ug/L		97	77 - 122
Methyl acetate	50.0	47.0		ug/L		94	74 - 133
Methyl tert-butyl ether	25.0	25.0		ug/L		100	77 - 120
Methylcyclohexane	25.0	24.3		ug/L		97	68 - 134
Methylene Chloride	25.0	24.3		ug/L		97	75 - 124
Styrene	25.0	25.3		ug/L		101	80 - 120
Tetrachloroethene	25.0	26.6		ug/L		107	74 - 122
Toluene	25.0	25.2		ug/L		101	80 - 122
trans-1,2-Dichloroethene	25.0	24.4		ug/L		98	73 - 127
trans-1,3-Dichloropropene	25.0	27.5		ug/L		110	80 - 120
Trichloroethene	25.0	24.8		ug/L		99	74 - 123
Trichlorofluoromethane	25.0	25.8		ug/L		103	62 - 150
Vinyl chloride	25.0	22.8		ug/L		91	65 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*100*		*77 - 120*
Toluene-d8 (Surr)	*104*		*80 - 120*
4-Bromofluorobenzene (Surr)	*103*		*73 - 120*
Dibromofluoromethane (Surr)	*103*		*75 - 123*

Lab Sample ID: LCSD 480-726582/7
Matrix: Water
Analysis Batch: 726582

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1,1-Trichloroethane	25.0	24.5		ug/L		98	73 - 126	4	15
1,1,2,2-Tetrachloroethane	25.0	26.2		ug/L		105	76 - 120	1	15
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	26.7		ug/L		107	61 - 148	2	20
1,1,2-Trichloroethane	25.0	26.4		ug/L		106	76 - 122	1	15

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 480-726582/7
Matrix: Water
Analysis Batch: 726582

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1-Dichloroethane			25.0	25.8		ug/L		103	77 - 120	3	20
1,2,4-Trichlorobenzene			25.0	27.1		ug/L		108	79 - 122	2	20
1,2-Dibromo-3-Chloropropane			25.0	25.2		ug/L		101	56 - 134	5	15
1,2-Dibromoethane			25.0	26.4		ug/L		106	77 - 120	1	15
1,2-Dichlorobenzene			25.0	25.4		ug/L		102	80 - 124	1	20
1,2-Dichloroethane			25.0	25.1		ug/L		100	75 - 120	2	20
1,2-Dichloropropane			25.0	25.3		ug/L		101	76 - 120	1	20
1,3-Dichlorobenzene			25.0	25.1		ug/L		101	77 - 120	1	20
1,4-Dichlorobenzene			25.0	24.7		ug/L		99	80 - 120	0	20
2-Butanone (MEK)			125	214	*+	ug/L		171	57 - 140	4	20
o-Chlorotoluene			25.0	25.7		ug/L		103	76 - 121	1	20
2-Hexanone			125	129		ug/L		103	65 - 127	4	15
4-Methyl-2-pentanone (MIBK)			125	129		ug/L		103	71 - 125	5	35
Acetone			125	120		ug/L		96	56 - 142	4	15
Benzene			25.0	25.0		ug/L		100	71 - 124	0	13
Bromoform			25.0	28.8		ug/L		115	61 - 132	0	15
Bromomethane			25.0	21.5		ug/L		86	55 - 144	2	15
Carbon disulfide			25.0	25.3		ug/L		101	59 - 134	5	15
Carbon tetrachloride			25.0	25.3		ug/L		101	72 - 134	2	15
Chlorobenzene			25.0	25.2		ug/L		101	80 - 120	2	25
Chlorodibromomethane			25.0	27.5		ug/L		110	75 - 125	1	15
Chloroethane			25.0	22.0		ug/L		88	69 - 136	2	15
Chloroform			25.0	24.4		ug/L		98	73 - 127	0	20
Chloromethane			25.0	22.2		ug/L		89	68 - 124	4	15
cis-1,2-Dichloroethene			25.0	25.3		ug/L		101	74 - 124	2	15
cis-1,3-Dichloropropene			25.0	26.0		ug/L		104	74 - 124	0	15
Cyclohexane			25.0	23.0		ug/L		92	59 - 135	2	20
Bromodichloromethane			25.0	26.0		ug/L		104	80 - 122	1	15
Dichlorofluoromethane			25.0	23.7		ug/L		95	76 - 127	3	20
Ethylbenzene			25.0	25.7		ug/L		103	77 - 123	1	15
Isopropylbenzene			25.0	24.8		ug/L		99	77 - 122	2	20
Methyl acetate			50.0	49.6		ug/L		99	74 - 133	5	20
Methyl tert-butyl ether			25.0	25.3		ug/L		101	77 - 120	1	37
Methylcyclohexane			25.0	24.5		ug/L		98	68 - 134	1	20
Methylene Chloride			25.0	24.4		ug/L		98	75 - 124	0	15
Styrene			25.0	25.5		ug/L		102	80 - 120	1	20
Tetrachloroethene			25.0	27.3		ug/L		109	74 - 122	3	20
Toluene			25.0	25.6		ug/L		102	80 - 122	2	15
trans-1,2-Dichloroethene			25.0	24.9		ug/L		99	73 - 127	2	20
trans-1,3-Dichloropropene			25.0	27.8		ug/L		111	80 - 120	1	15
Trichloroethene			25.0	25.3		ug/L		101	74 - 123	2	16
Trichlorofluoromethane			25.0	25.6		ug/L		102	62 - 150	1	20
Vinyl chloride			25.0	23.2		ug/L		93	65 - 133	2	15

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*100*		*77 - 120*
Toluene-d8 (Surr)	*103*		*80 - 120*
4-Bromofluorobenzene (Surr)	*106*		*73 - 120*

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 480-726582/7
Matrix: Water
Analysis Batch: 726582

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Dibromofluoromethane (Surr)	100		75 - 123

QC Association Summary

Client: Waste Management
Project/Site: ChemTrol Site - Groundwater

Job ID: 480-223722-1

GC/MS VOA

Analysis Batch: 726431

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-223722-1	TB-092524	Total/NA	Water	8260C	
480-223722-2	FD-092524	Total/NA	Water	8260C	
480-223722-3	MW-13R	Total/NA	Water	8260C	
480-223722-4	MW-15R	Total/NA	Water	8260C	
480-223722-5	MW-3S	Total/NA	Water	8260C	
480-223722-6	MW-7R	Total/NA	Water	8260C	
480-223722-7	MW-8R	Total/NA	Water	8260C	
480-223722-8	MW-9R	Total/NA	Water	8260C	
MB 480-726431/8	Method Blank	Total/NA	Water	8260C	
LCS 480-726431/6	Lab Control Sample	Total/NA	Water	8260C	

Analysis Batch: 726582

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-223722-2 - DL	FD-092524	Total/NA	Water	8260C	
MB 480-726582/9	Method Blank	Total/NA	Water	8260C	
LCS 480-726582/6	Lab Control Sample	Total/NA	Water	8260C	
LCSD 480-726582/7	Lab Control Sample Dup	Total/NA	Water	8260C	

Lab Chronicle

Client: Waste Management
Project/Site: ChemTrol Site - Groundwater

Job ID: 480-223722-1

Client Sample ID: TB-092524
Lab Sample ID: 480-223722-1
Date Collected: 09/25/24 00:00
Matrix: Water
Date Received: 09/25/24 15:22

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	726431	LCH	EET BUF	09/28/24 05:48

Client Sample ID: FD-092524
Lab Sample ID: 480-223722-2
Date Collected: 09/25/24 00:00
Matrix: Water
Date Received: 09/25/24 15:22

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	726431	LCH	EET BUF	09/28/24 06:10
Total/NA	Analysis	8260C	DL	40	726582	ERS	EET BUF	09/30/24 15:01

Client Sample ID: MW-13R
Lab Sample ID: 480-223722-3
Date Collected: 09/25/24 10:20
Matrix: Water
Date Received: 09/25/24 15:22

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		40	726431	LCH	EET BUF	09/28/24 06:33

Client Sample ID: MW-15R
Lab Sample ID: 480-223722-4
Date Collected: 09/25/24 09:25
Matrix: Water
Date Received: 09/25/24 15:22

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		2	726431	LCH	EET BUF	09/28/24 06:55

Client Sample ID: MW-3S
Lab Sample ID: 480-223722-5
Date Collected: 09/25/24 12:15
Matrix: Water
Date Received: 09/25/24 15:22

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1000	726431	LCH	EET BUF	09/28/24 07:18

Client Sample ID: MW-7R
Lab Sample ID: 480-223722-6
Date Collected: 09/25/24 08:20
Matrix: Water
Date Received: 09/25/24 15:22

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	726431	LCH	EET BUF	09/28/24 07:41

Client Sample ID: MW-8R
Lab Sample ID: 480-223722-7
Date Collected: 09/25/24 11:15
Matrix: Water
Date Received: 09/25/24 15:22

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		4	726431	LCH	EET BUF	09/28/24 08:03

Lab Chronicle

Client: Waste Management
Job ID: 480-223722-1
Project/Site: ChemTrol Site - Groundwater

Client Sample ID: MW-9R
Lab Sample ID: 480-223722-8

Date Collected: 09/25/24 13:20
Matrix: Water

Date Received: 09/25/24 15:22

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		4	726431	LCH	EET BUF	09/28/24 08:26

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Accreditation/Certification Summary

Client: Waste Management
Job ID: 480-223722-1
Project/Site: ChemTrol Site - Groundwater

Laboratory: Eurofins Buffalo

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
New York	NELAP	10026	03-31-25

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8260C		Water	Dichlorofluoromethane

Method Summary

Client: Waste Management
Project/Site: ChemTrol Site - Groundwater

Job ID: 480-223722-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	EET BUF
5030C	Purge and Trap	SW846	EET BUF

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Sample Summary

Client: Waste Management
Project/Site: ChemTrol Site - Groundwater

Job ID: 480-223722-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-223722-1	TB-092524	Water	09/25/24 00:00	09/25/24 15:22
480-223722-2	FD-092524	Water	09/25/24 00:00	09/25/24 15:22
480-223722-3	MW-13R	Water	09/25/24 10:20	09/25/24 15:22
480-223722-4	MW-15R	Water	09/25/24 09:25	09/25/24 15:22
480-223722-5	MW-3S	Water	09/25/24 12:15	09/25/24 15:22
480-223722-6	MW-7R	Water	09/25/24 08:20	09/25/24 15:22
480-223722-7	MW-8R	Water	09/25/24 11:15	09/25/24 15:22
480-223722-8	MW-9R	Water	09/25/24 13:20	09/25/24 15:22

10 Hazelwood Drive
Amherst, NY 14228-2298
Phone: 716-691-2600 Fax: 716-691-7991

Chain of Custody Record

eurofins | Environment Testing

Client Information	Sampler: Tom Urban / Chris Finn	Lab PM: VanDette, Ryan T	Carrier Tracking No(s):	COC No: 480-198188-30197.1
Client Contact: Chad Moose	Phone: 716-856-5636	E-Mail: Ryan.VanDette@et.eurofinsus.com	State of Origin: NY	Page: Page 1 of 1
Company: Waste Management	PWSID:			Job #:
Address: Tullytown Landfill 444 Oxford Valley Road	Due Date Requested:			Preservation Codes: A - HCL
City: Morrisville	TAT Requested (days):			
State, Zip: PA, 19067	Compliance Project: Δ Yes Δ No			
Phone: 215-269-2114(Tel) 215-699-8315(Fax)	PO #: 13453950			
Email: cmoose@wm.com	WO #:			
Project Name: ChemTrol Site/NY22 Event Desc: ChemTrol Annual Groundwate	Project #: 48002447			
Site: New York	SSOW#:			

Analysis Requested

480-223722 Chain of Custody

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260C - Volatiles	Total Number of conta	Special Instructions/Note:
Preservation Code:							A		
Trip Blank TB-092524	9/25/24	—	G	Water	N	N	3	1	
DUP FD-092524	9/25/24	—	G	Water	N	N	3	3	
MW-13R	9/25/24	1020	G	Water	N	N	3	3	
MW-15R	9/25/24	0925	G	Water	N	N	3	3	
MW-3S	9/25/24	1215	G	Water	N	N	3	3	
MW-7R	9/25/24	0820	G	Water	N	N	3	3	
MW-8R	9/25/24	1115	G	Water	N	N	3	3	
MW-9R	9/25/24	1320	G	Water	N	N	3	3	

Other:

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment: Drop off

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1	Christopher Finn	9/25/24 1522	AECOM			
2						
3					9/25/24 1522	

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: 4.0 IR#5C ICE

Ver: 05/06/2024

ATTACHMENT E

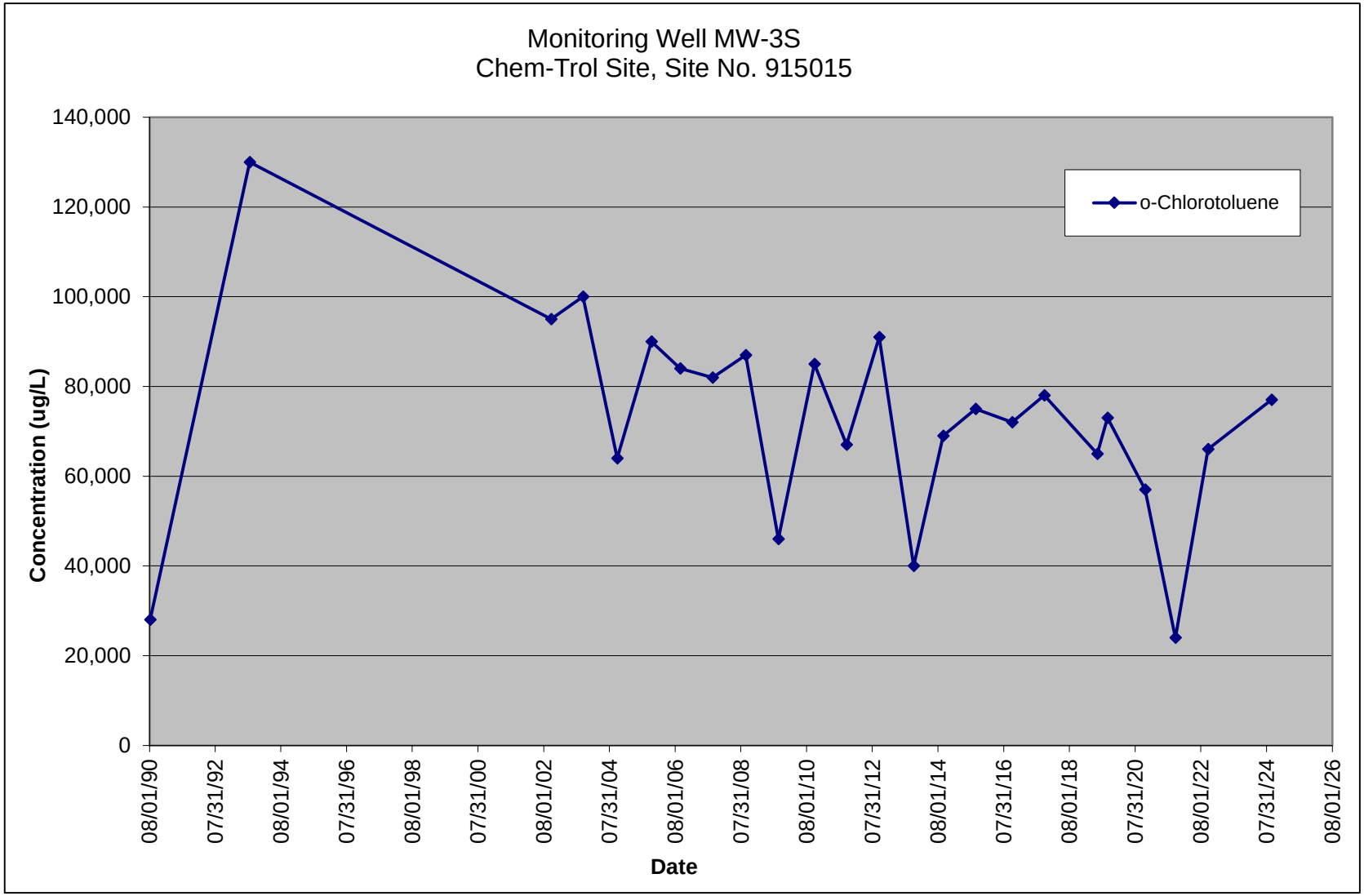
Historical Groundwater Monitoring Data Trend Plots

CHEM-TROL SITE

Groundwater Analytical Data for Well MW-3S (ug/L)

Date	o-Chlorotoluene
08/09/90	28,000
08/19/93	130,000
10/23/02	95,000
10/13/03	100,000
10/26/04	64,000
11/11/05	90,000
09/27/06	84,000
09/20/07	82,000
09/24/08	87,000
09/22/09	46,000
10/27/10	85,000
10/20/11	67,000
10/17/12	91,000
11/05/13	40,000
09/29/14	69,000
09/23/15	75,000
11/02/16	72,000
10/25/17	78,000
06/07/19	65,000
09/30/19	73,000
11/20/20	57,000
10/22/21	24,000
10/20/22	66,000
09/25/24	77,000

Note: Data not collected 10/30/18 due to the well being dry; as a result, 2018 annual sample collected 06/07/19.

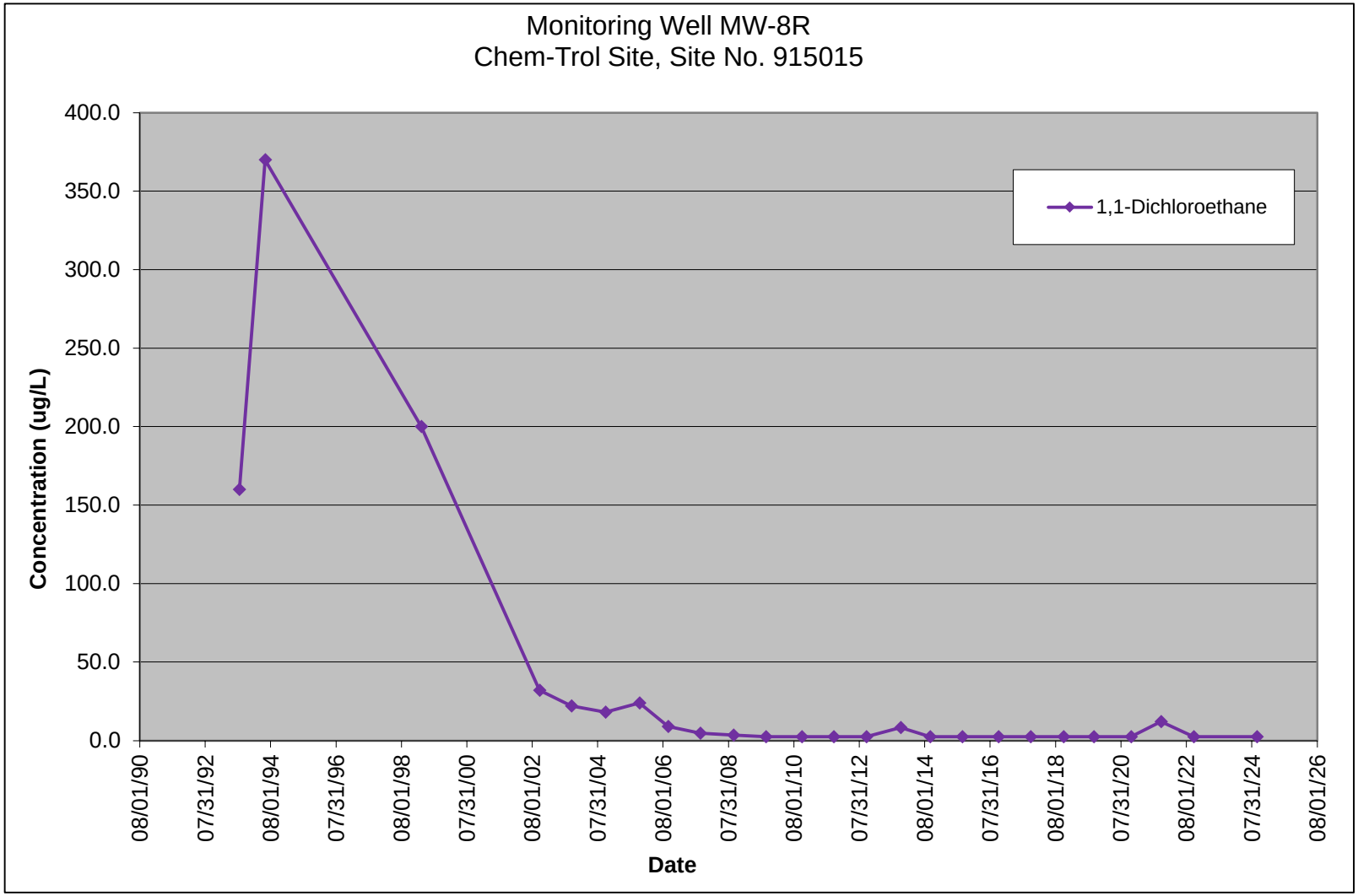

Monitoring Well MW-3S
Chem-Trol Site, Site No. 915015
140,000
120,000
100,000
80,000
60,000
40,000
20,000
0
Concentration (ug/L)
o-Chlorotoluene
08/01/90
07/31/92
08/01/94
07/31/96
08/01/98
07/31/00
08/01/02
07/31/04
08/01/06
07/31/08
08/01/10
07/31/12
08/01/14
07/31/16
08/01/18
07/31/20
08/01/22
07/31/24
08/01/26
Date

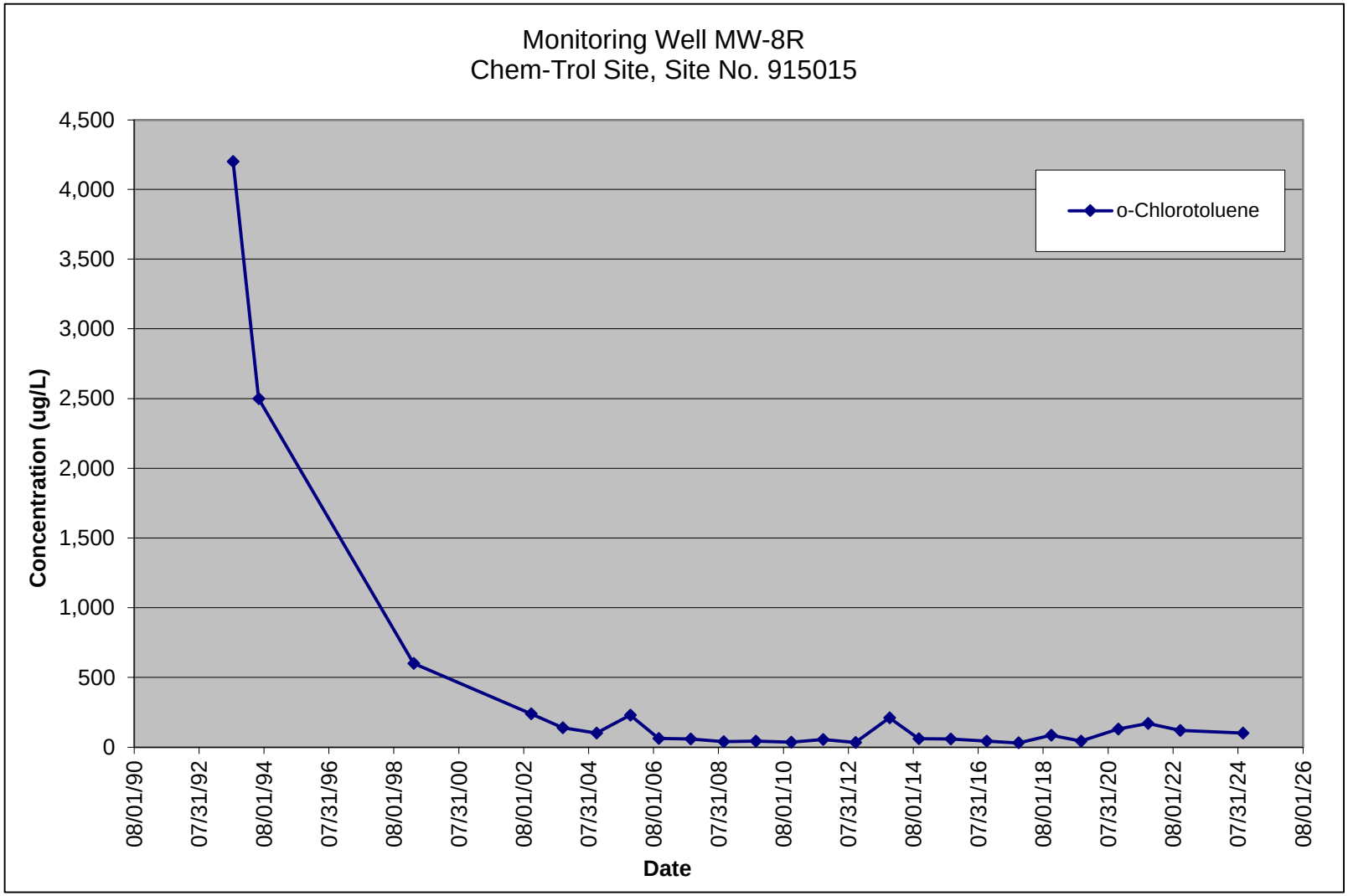
CHEM-TROL SITE

Groundwater Analytical Data for Well MW-8R (ug/L)

Date	1,1-Dichloroethane	o-Chlorotoluene
08/16/93	160.0	4,200
06/01/94	370.0	2,500
03/10/99	200.0	600.0
10/22/02	32.0	240.0
10/13/03	22.0	140.0
10/26/04	18.0	100.0
11/11/05	24.0	230.0
09/27/06	8.9	63.0
09/20/07	4.7	58.0
09/24/08	3.4	40.0
09/22/09	2.5	43.0
10/27/10	2.5	35.0
10/20/11	2.5	55.0
10/17/12	2.5	34.0
11/05/13	8.2	210.0
09/29/14	2.5	61.0
09/23/15	2.5	59.0
11/02/16	2.5	44.0
10/25/17	2.5	31.0
10/30/18	2.5	85.0
09/30/19	2.5	44.0
11/20/20	2.5	130.0
10/22/21	12.0	170.0
10/20/22	2.5	120.0
09/25/24	2.5	100.0

Value is equal to 1/2 the detection limit.


Monitoring Well MW-8R
Chem-Trol Site, Site No. 915015
400.0
350.0
300.0
250.0
200.0
150.0
100.0
50.0
0.0
Concentration (ug/L)
1,1-Dichloroethane
08/01/90
07/31/92
08/01/94
07/31/96
08/01/98
07/31/00
08/01/02
07/31/04
08/01/06
07/31/08
08/01/10
07/31/12
08/01/14
07/31/16
08/01/18
07/31/20
08/01/22
07/31/24
08/01/26
Date


Monitoring Well MW-8R
Chem-Trol Site, Site No. 915015
Concentration (ug/L)
4,500
4,000
3,500
3,000
2,500
2,000
1,500
1,000
500
0
o-Chlorotoluene
08/01/90
07/31/92
08/01/94
07/31/96
08/01/98
07/31/00
08/01/02
07/31/04
08/01/06
07/31/08
08/01/10
07/31/12
08/01/14
07/31/16
08/01/18
07/31/20
08/01/22
07/31/24
08/01/26
Date

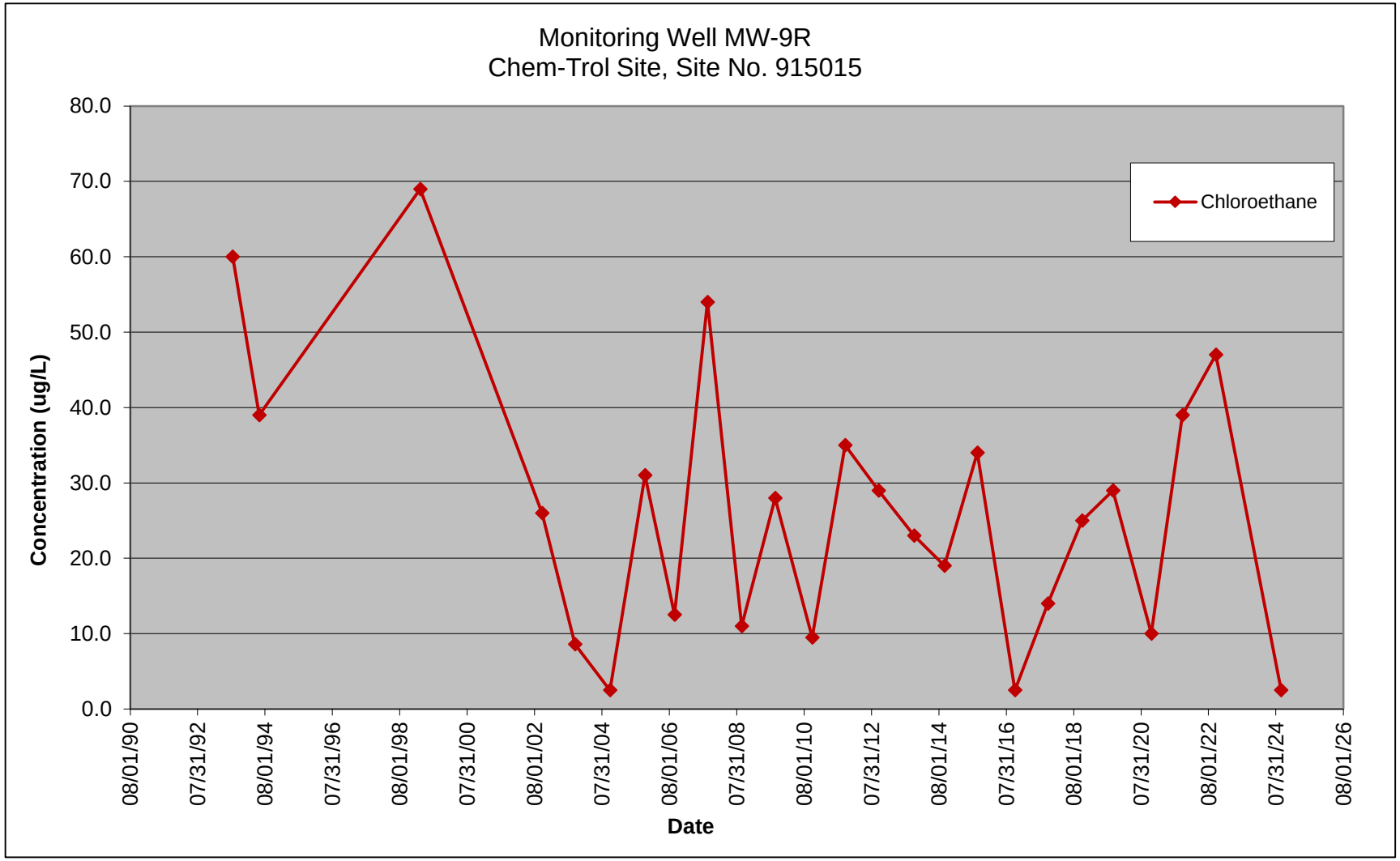
CHEM-TROL SITE

Groundwater Analytical Data for Well MW-9R (ug/L)

Date	Chloroethane	1,1-Dichloroethane	o-Chlorotoluene	1,1,1-Trichloroethane	Trichloroethene
08/16/93	60.0	1,000		1,300	330.0
06/01/94	39.0	860.0	620.0	2,800	300.0
03/10/99	69.0	470.0	180.0	630.0	260.0
10/22/02	26.0	190.0	1,100	540.0	8.2
10/13/03	8.6	93.0	140.0	460.0	10.0
10/26/04	2.5	2.5	2.5	2.5	2.5
11/11/05	31.0	180.0	190.0	410.0	2.4
09/27/06	12.5	46.0	18.0	440.0	12.5
09/20/07	54.0	270.0	2,000	1,800	5.1
09/24/08	11.0	64.0	62.0	170.0	0.68
09/22/09	28.0	85.0	33.0	300.0	2.5
10/27/10	9.5	93.0	100.0	310.0	2.5
10/20/11	35.0	140.0	150.0	250.0	
10/17/12	29.0	150.0	380.0	410.0	
11/05/13	23.0	82.0	97.0	220.0	2.5
09/29/14	19.0	300.0	860.0	540.0	7.1
09/23/15	34.0	350.0	1900.0	530.0	2.5
11/02/16	2.5	31.0	38.0	82.0	2.5
10/25/17	14.0	410.0	2100.0	640.0	2.5
10/30/18	25.0	130.0	40.0	150.0	2.5
09/30/19	29.0	89.0	39.0	200.0	2.5
11/20/20	10.0	120.0	2.5	200.0	2.5
10/22/21	39.0	240.0	2.5	130.0	2.5
10/20/22	47.0	300.0	2.5	150.0	2.5
09/25/24	2.5	71.0	2.5	160.0	2.5

Data not included due to 1/2 the detection limit being higher than the previous 3 years of positive results.

Value is equal to 1/2 the detection limit.


Monitoring Well MW-9R
Chem-Trol Site, Site No. 915015
Concentration (ug/L)
80.0
70.0
60.0
50.0
40.0
30.0
20.0
10.0
0.0
Chloroethane
08/01/90
07/31/92
08/01/94
07/31/96
08/01/98
07/31/00
08/01/02
07/31/04
08/01/06
07/31/08
08/01/10
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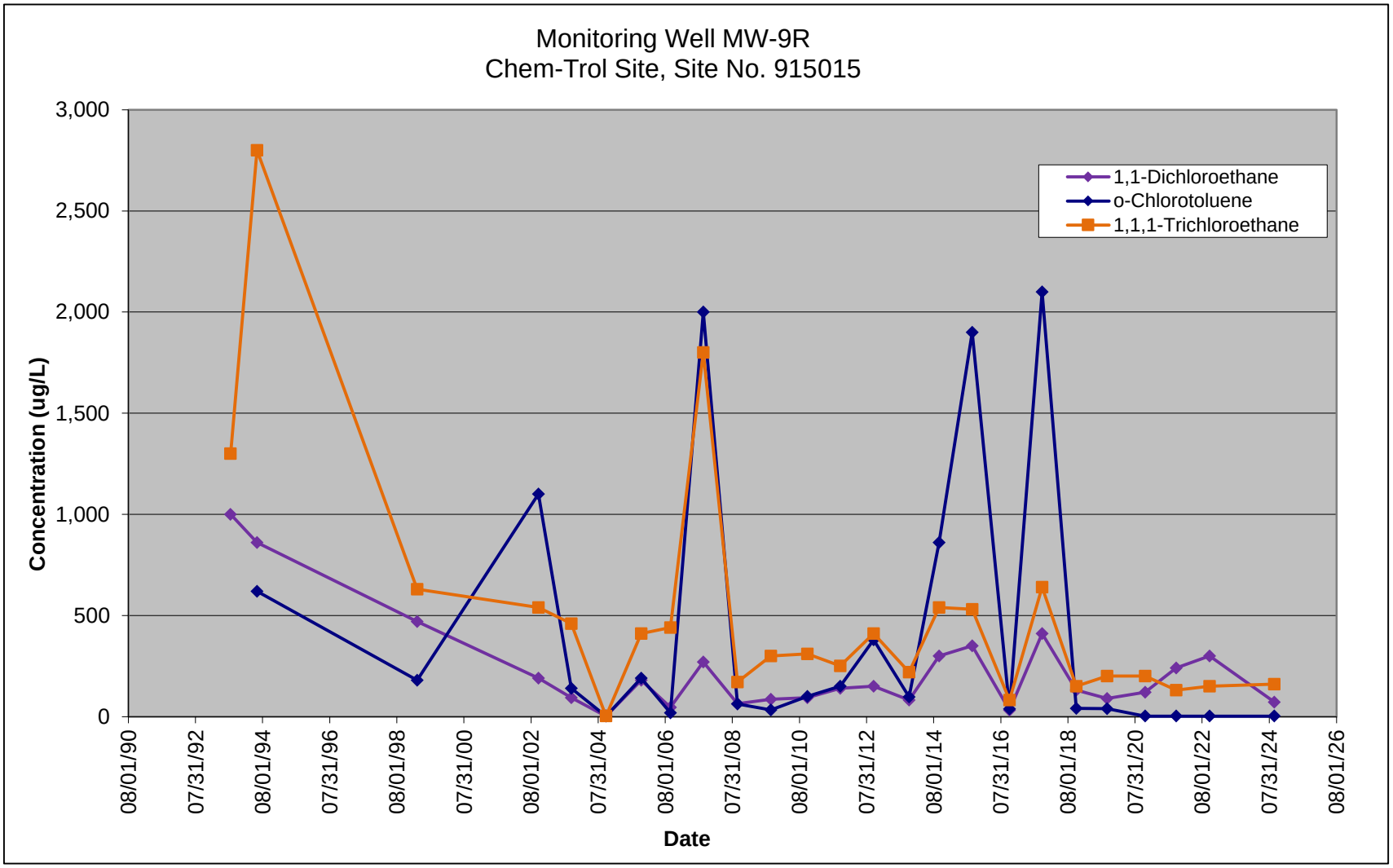
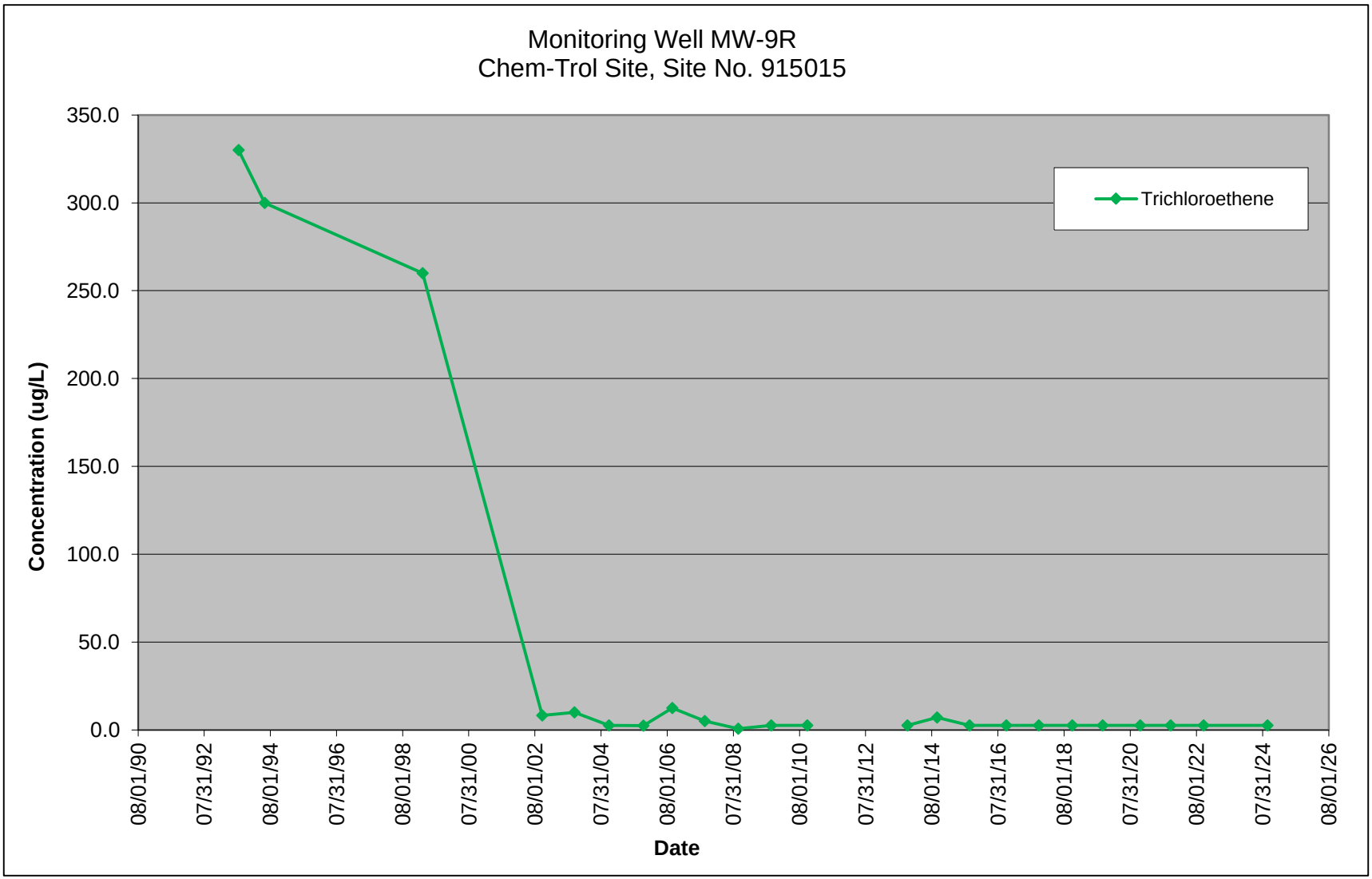
08/01/18
07/31/20
08/01/22
07/31/24
08/01/26
Date


Monitoring Well MW-9R
Chem-Trol Site, Site No. 915015
Concentration (ug/L)
3,000
2,500
2,000
1,500
1,000
500
0
08/01/90
07/31/92
08/01/94
07/31/96
08/01/98
07/31/00
08/01/02
07/31/04
08/01/06
07/31/08
08/01/10
07/31/12
08/01/14
07/31/16
08/01/18
07/31/20
08/01/22
07/31/24
08/01/26
Date
1,1-Dichloroethane
o-Chlorotoluene
1,1,1-Trichloroethane


Monitoring Well MW-9R
Chem-Trol Site, Site No. 915015
Trichloroethene
Concentration (ug/L)
350.0
300.0
250.0
200.0
150.0
100.0
50.0
0.0
08/01/90
07/31/92
08/01/94
07/31/96
08/01/98
07/31/00
08/01/02
07/31/04
08/01/06
07/31/08
08/01/10
07/31/12
08/01/14
07/31/16
08/01/18
07/31/20
08/01/22
07/31/24
08/01/26
Date

CHEM-TROL SITE

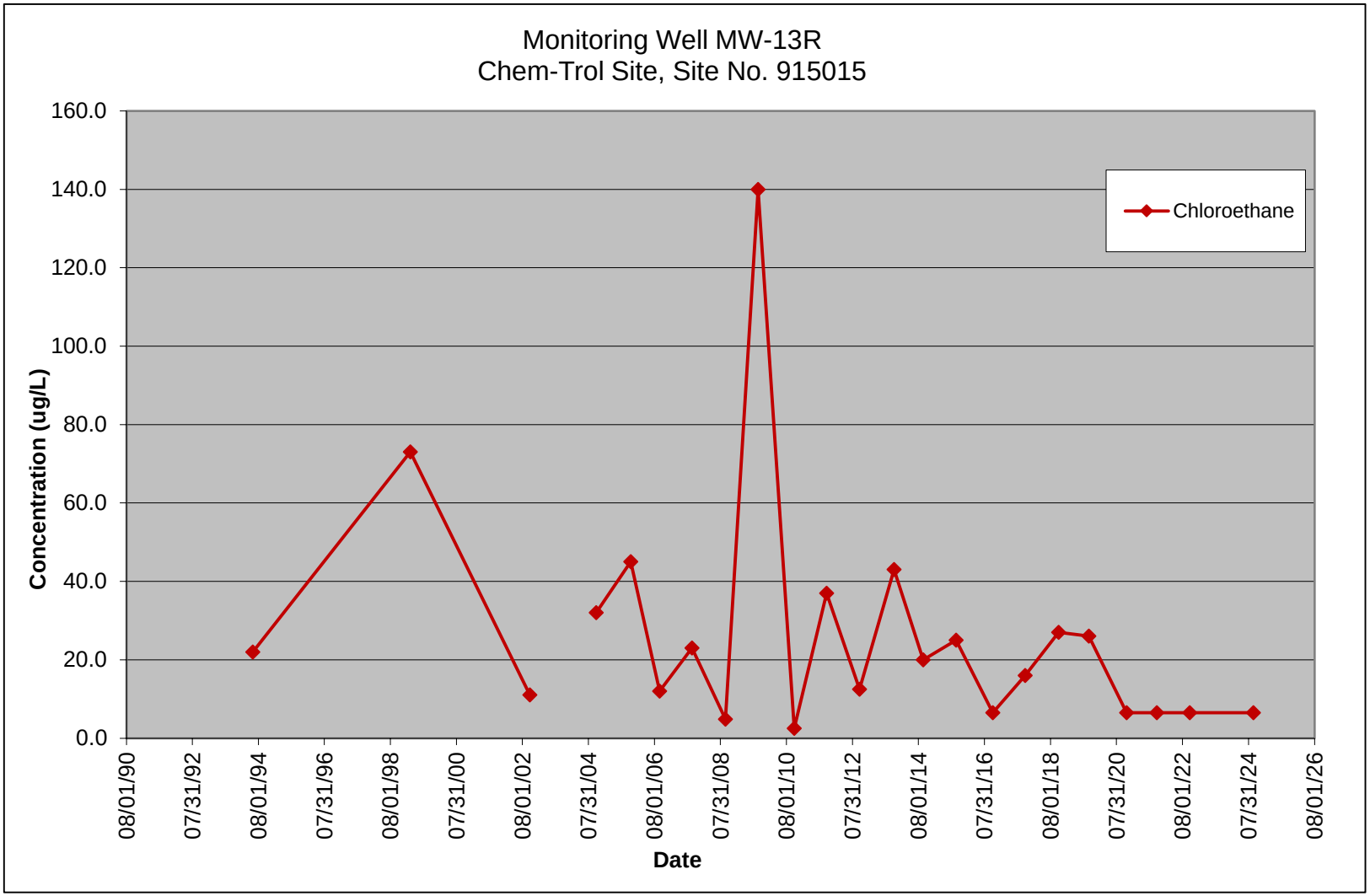
Groundwater Analytical Data for Well MW-13R (ug/L)

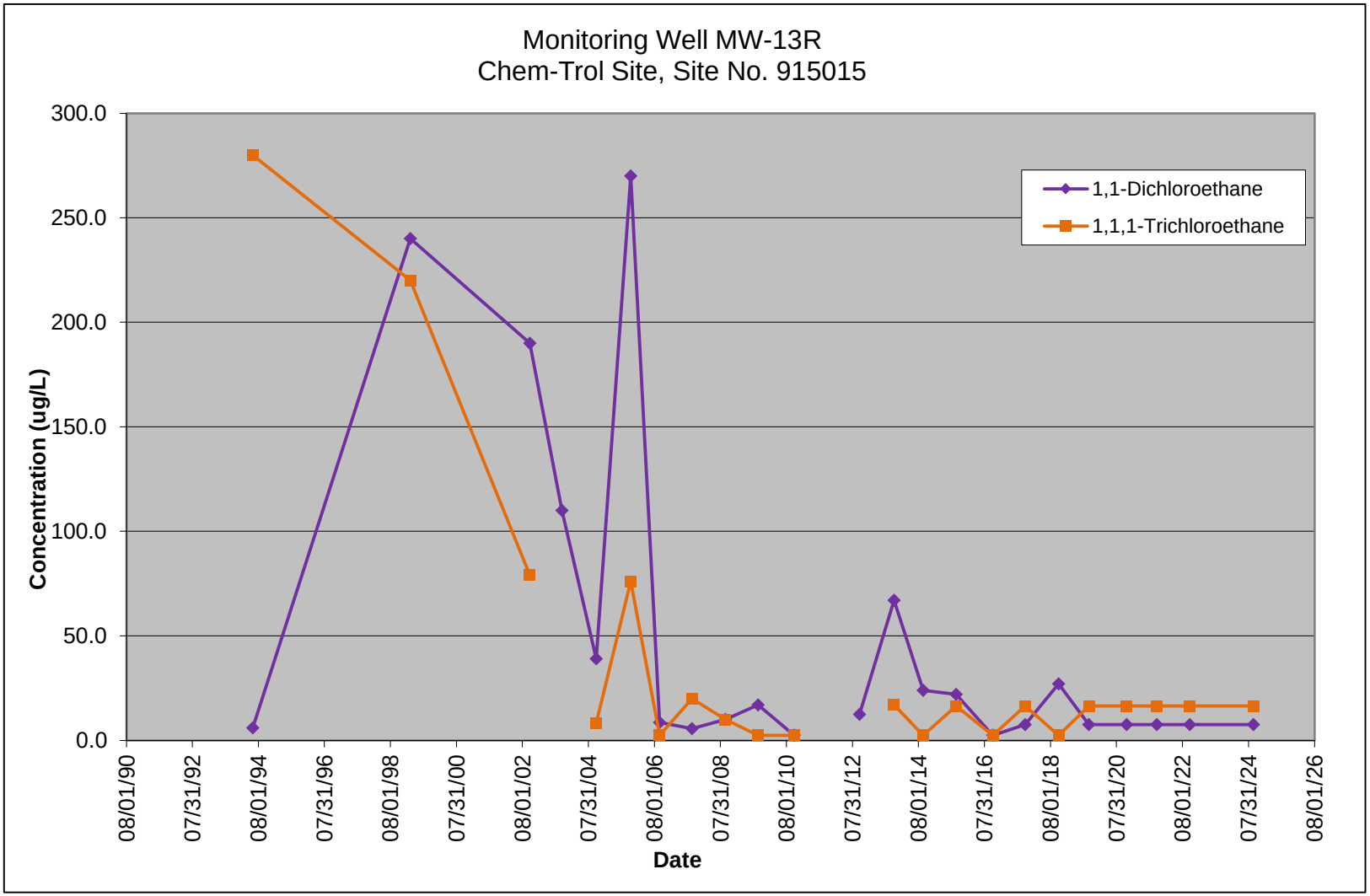
Date	Chloroethane	1,1-Dichloroethane	1,1,1-Trichloroethane	o-Chlorotoluene
05/31/94	22.0	6.0	280.0	1,700
03/11/99	73.0	240.0	220.0	
10/22/02	11.0	190.0	79.0	4,200
10/13/03		110.0		4,500
10/26/04	32.0	39.0	8.2	1,900
11/11/05	45.0	270.0	76.0	4,900
09/27/06	12.0	8.6	2.5	680.0
09/20/07	23.0	5.6	20.0	440.0
09/24/08	4.8	10.0	10.0	250.0
09/22/09	140.0	17.0	2.5	600.0
10/27/10	2.5	2.5	2.5	210.0
10/20/11	37.0			820.0
10/17/12	12.5	12.5		410.0
11/05/13	43.0	67.0	17.0	2,500
09/24/14	20.0	24.0	2.5	2,000
09/23/15	25.0	22.0	16.5	3200
11/02/16	6.5	2.5	2.5	1200
10/25/17	16.0	7.5	16.5	2000
10/30/18	27.0	27.0	2.5	2300
09/30/19	26.0	7.5	16.5	2500
11/20/20	6.5	7.5	16.5	1100
10/22/21	6.5	7.5	16.5	1700
10/20/22	6.5	7.5	16.5	1600
09/25/24	6.5	7.5	16.5	1400

Data not included due to high detection limits for ND values: (1) 2003 - 200 ug/L except for Total Xylenes, which was 600 ug/L.

Data not included due to 1/2 the detection limit being higher than the previous 3 years of positive results.

Value is equal to 1/2 the detection limit.


Monitoring Well MW-13R
Chem-Trol Site, Site No. 915015
Chloroethane
Concentration (ug/L)
160.0
140.0
120.0
100.0
80.0
60.0
40.0
20.0
0.0
08/01/90
07/31/92
08/01/94
07/31/96
08/01/98
07/31/00
08/01/02
07/31/04
08/01/06
07/31/08
08/01/10
07/31/12
08/01/14
07/31/16
08/01/18
07/31/20
08/01/22
07/31/24
08/01/26
Date


Monitoring Well MW-13R
Chem-Trol Site, Site No. 915015
300.0
250.0
200.0
150.0
100.0
50.0
0.0
Concentration (ug/L)
1,1-Dichloroethane
1,1,1-Trichloroethane
08/01/90
07/31/92
08/01/94
07/31/96
08/01/98
07/31/00
08/01/02
07/31/04
08/01/06
07/31/08
08/01/10
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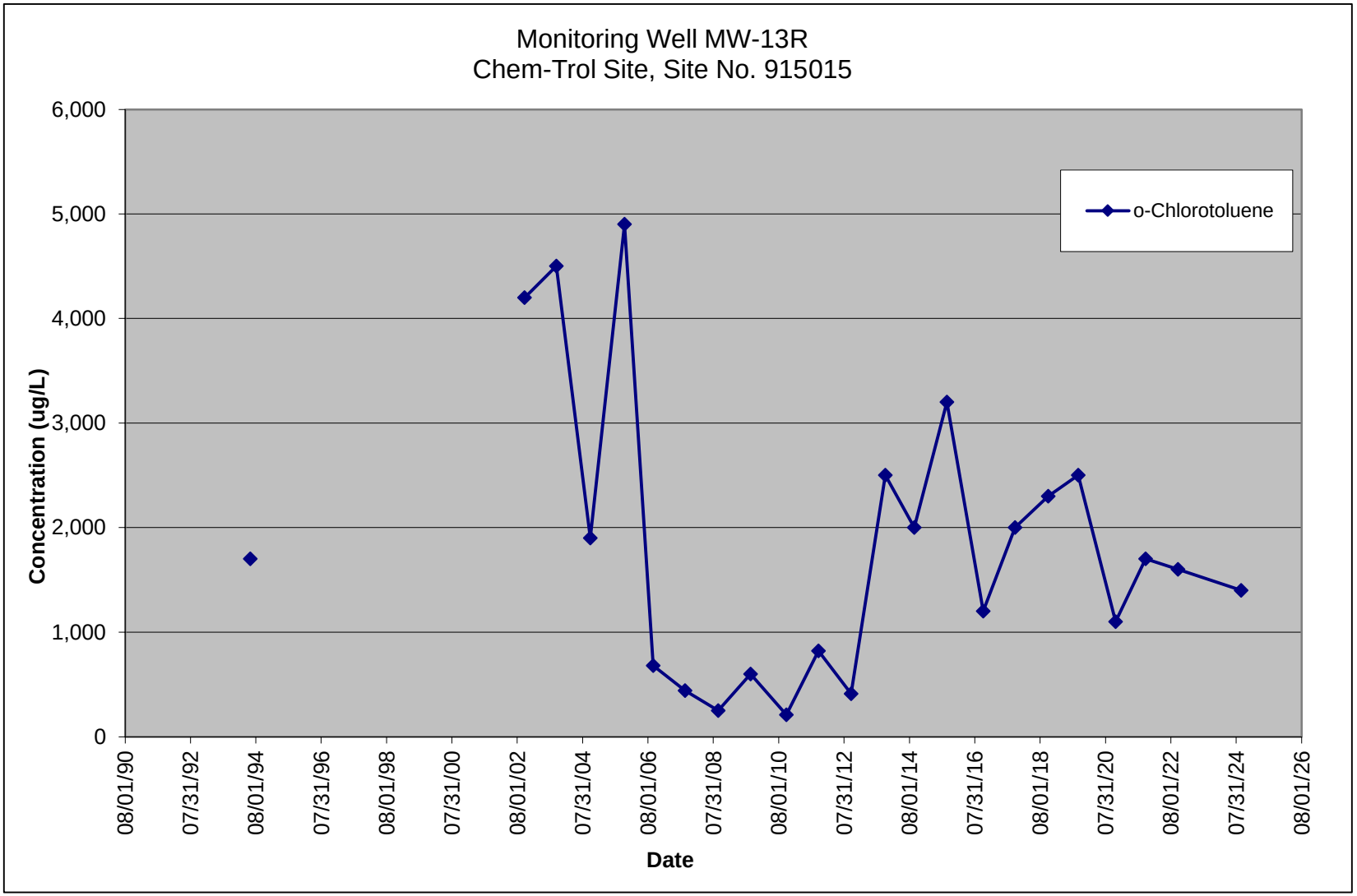
08/01/18
07/31/20
08/01/22
07/31/24
08/01/26
Date


Monitoring Well MW-13R
Chem-Trol Site, Site No. 915015
6,000
5,000
4,000
3,000
2,000
1,000
0
Concentration (ug/L)
o-Chlorotoluene
08/01/90
07/31/92
08/01/94
07/31/96
08/01/98
07/31/00
08/01/02
07/31/04
08/01/06
07/31/08
08/01/10
07/31/12
08/01/14
07/31/16
08/01/18
07/31/20
08/01/22
07/31/24
08/01/26
Date